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MEDIÆVAL MUSIC

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MEDIÆVAL MUSIC.

MEDIÆVAL MUSIC:

An Historical Sketch.

BY

ROBERT CHARLES HOPE, F.S.A.,

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"A GLOSSARY OF DIALECTAL PLACE-NOMENCLATURE," "AN INVENTORY OF THE CHURCH PLATE IN RUTLAND," "THE LEPER IN ENGLAND,"
"ENGLISH GOLDSMITHS,"
"THE TEMPLES AND SHRINES OF NIKKO, JAPAN,"
"THE HOLY WELLS OF ENGLAND,"
ETC., ETC.

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TO HIS VALUED FRIEND AND FELLOW-TRAVELLER,

ON MANY JOURNEYS AT HOME AND ABROAD,

GEORGE LORD BEEFORTH, ESQ., J.P., F.S.A., F.R.G.S.

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PREFACE.

THIS second edition has been thoroughly revised, rearranged in form, and several new features have been added.

The first edition, thanks to the public and the kind criticisms almost unanimously accorded to it by the press, was out of print within a month of its publication.

The long delay in issuing this edition has been caused partly by a lengthy absence during a tour in the East, and partly by a long and serious illness.

In compiling this historical sketch many and great difficulties have had to be coped with; to solve them the best authorities have been appealed to, and, where such have failed to supply the particular information sought for, that opinion which on mature consideration appeared most feasible has been given.

The Supplementary chapter on Homonic and Monadic Music has been appended with the object only of giving in as clear and concise a manner as possible a general outline of the developments to which the science of harmony had attained from the end of the sixteenth and beginning of the seventeenth to the nineteenth century.

Any attempt to elucidate a complex and neglected subject like the present one, must of necessity call forth criticisms both from those who are capable as from those whose blind prejudice renders them incapable of the expression of an opinion.

That this work is perfect no claim is put forth, but an earnest effort has been made to attain such a desired result.

Grateful thanks are tendered to Mr. T. L. Southgate and to Dr. J. Wickham Legg, F.S.A. To the former for interesting notes on the music of Egypt, and to the latter for learned matter on Liturgical subjects generally. Much valuable information in elucidating the abstruse subject of measurable music has been obtained from the pages of Sir George Grove's admirable "Dictionary of Music and Musicians," which is fully and thankfully acknowledged.

It will be gathered from the following pages how far ahead in all matters musical England was during the mediæval times, over all continental nations, excelling especially in part writing and part singing.

The major mode, harmony, counterpoint, canon, round, and the glee were first made use of, if they were not invented and originated, in this country, in proof of which there is much evidence.

Erasmus, born 1467, died 1536, said "The English challenge the prerogative of having the most handsome women, and of being the most accomplished in the skill of music of any people."

The wanton wholesale destruction of our Cathedral and Monastic libraries during the reign of Henry VIII., and again during the course of the great Rebellion lost us no doubt many priceless musical treasures of the past.

The Puritans swept away in their mad fanatical fury and zeal, to "purify the morals of the people" and to destroy and hinder in the worship of religion, all that did not coincide with their own narrow-minded and distorted views. Libraries were ransacked for ancient musical ser-

vice books, and orders were given that these books should be torn and destroyed, and that the Cathedral services should be abolished. Organs were to be pulled down and the pipes melted down into quart pots or made into bullets. The arts especially were assailed; perhaps as muchruthless vandalism can be laid to their charge as to the arch-adulterer Henry VIII.

It was a period of dire desolation in musical art. In 1656 Cromwell issued a proclamation that fiddlers and other musicians should be adjudged rogues, vagabonds, and beggars.

Thus the pre-eminence of England as a musical nation, held from the tenth to the sixteenth centuries now ceased, and England was left behind other nations in progression, but the revival which began in this century is, however, it is pleasing to record, already bearing good fruit.

For further information on Greek Music the writings of Mr. Abby Williams, "Greek Accents," by C. T. Carruthers, and "The Modes of Ancient Greek Music," by D. B. Monro, should be consulted.

INTRODUCTION.

THE study of the Music of the Middle ages is indispensable to the would-be musician; a just appreciation and true understanding of modern music, can only thereby be attained. On the other hand, the systems of ancient music cannot be mastered and understood without the knowledge of the principles on which modern music is grounded.

"It is impossible clearly to understand what the established forms of musical structure mean unless we know how they have grown up: history is as much a key to the true philosophy of music as acoustics, and both ought to be studied together, as such a mode of study will assuredly clear away many of the fallacies by which musical theory is at present encumbered."*

Music differs from her sisters of the fine arts in that she is transient, and more nearly connected with pure sensation. "The sensations of tone are the materials of the art, and, so far as these sensations are excited in music, we do not create out of them any images of external objects or actions, nor, apart from words, actions, or association of ideas can emotions be conveyed by music."†

The art being purely conventional, appeals to the mind in a manner totally different from the other arts. "Music is incomparably the most original of arts; it is the pure creation of human intellect. Music is the per-

* Dr. Pole, "Trans. Mus. Ass.," 1878-9, p. 97
† Helmholtz.

fection of an art, for it has no evil tendency; it also has a far greater and more immediate influence upon the mind than any other art."*

Music is either vocal or instrumental; the former, a gift inherent in man, is the most ancient, and is more or less at the immediate command of all mankind. Instrumental, on the contrary, is a matter of cultivation, in which a certain amount of technical labour is necessary to overcome mechanical obstacles, before it can be made use of. The three divisions of instruments are pulsatile, wind, strings, and the three may have been adopted in this order. The wind, it is said, has never been cultivated where the drum, in some form, has not been in previous use, nor the strings where the pipe has not first been adopted.†

The earliest form of music was homophonic, that is, one single part or melody. This kind still obtains in China, Japan, Corea, India, and among the Arabs, Turks, and the modern Greeks, notwithstanding the greatly developed systems of music possessed by some of these people.

The Pentatonic or five-note scale is the most ancient. It is found among the Chinese and the other branches of the Mongal race, the Malays of Java and Sumatra, the inhabitants of Hudson's Bay, New Caledonia, and of New Guinea, the Fullah negroes, the inhabitants of North Africa and of Abyssinia, the Figians, Hindoos, Siamese, Afghans, and in Asia generally, also in Mexico, Scotland, and Ireland, and it is said to be the natural scale with young children.

* Chappell, "H. of M.," xlvj.
† Rowbotham, "H. of M.," j.

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MEDIÆVAL MUSIC.

CHAPTER I.

THE MUSIC OF ANCIENT EGYPT.

THE ancient Egyptians, it is inferred from the contemporary sculptures and representations found in the tombs at Gizeh and elsewhere, were conversant with the diatonic system, probably as much so as we of the nineteenth century. The tombs of the great Pyramid of the kings at Gizeh are as early as the sixth year of Usertesen II., taking us back to a period nearly three thousand years before Christ.

Descriptions of Egyptian music are to be found in the writings of Strabo, Diodorus, Siculus, and Athanæus, and original instruments are deposited in various public museums in London, Paris, Florence, Leyden, and elsewhere. Illustrations can also be seen in the works of Sir Gardner Wilkinson, Champollion, Lepsius, and notably in Rosellini's splendid work.

The Bruce harp with twenty-one strings being finely shaped and excellently painted.

In 1893 Mr. Flinders Petrie discovered at Kahum, in the coffin of the Lady Maket, a pair of double flutes 3,000

years old, in such perfect condition that when straw reeds were inserted in their embouchures, they gave out the same sounds as they probably did before the Pharaohs; one of these slender flutes has three finger holes, the other four. The intervals produced are identical with those of our modern minor scale* with the semitones between the second and third, and fifth and sixth; this fact together with a careful study of specimens of the long oblique flute —the ancestor of the modern *Nay*, still used in Egypt— together with a remarkable ancient flute, having eleven holes and giving the chromatic scale, in the possession of Mons. Maspero, Mr. T. L. Southgate and others conclude with reason that the Greeks derived their scale from the ancient Egyptians. It is claimed that the Egyptians possessed a harmonic as well as a melodic system, it being impossible that the instruments in some of the bands represented could have played identical notes simultaneously. The compositions of the orchestras show combinations of instruments of various shapes and sizes of wind and string being employed together. This fact, with our knowledge of their being able by means of the finger board depicted on their lyres to produce different notes at one and the same time on their harps and flutes as is done on the modern violin and instruments of that species in our own day, is fair presumption that harmony was known to and practised by them.

Mr. Southgate† exhibited a pair of short double flutes of the chalumeau order, played with arghool reeds, precisely similar to those now used for the drones of the bagpipe. They were found by Mr. Flinders Petrie in a Coptic cemetery at Gurob, with the reed mouthpieces

* Proceedings of the "Musical Association," 1890-1891.

† Lecture recently given before the "Society for the Encouragement of the Fine Arts."

with which they were played, still perfect and sounding F when blown through. He also gave an account of the wonderful flutes found at Akhmin, giving the above scale; a statuette was also shown of a figure playing a double pipe, nearly 5,000 years old.

Their vocal scale is assumed to have been diatonic, whilst that of their instruments included portions of the chromatic and enharmonic* intervals.

Their scale was compared to the seven planets, including the sun and the moon.

The Musical Systems of Babylon, Assyria, Chaldea, Phœnicia, of Tyre and Sidon differed, there seems little doubt, from that of Egypt.

The musical instruments of these nations closely resemble one another in important points.

From the ponderous size of the Tebuni, or harps, depicted in the tombs, the Egyptians would seem to have been partial to deep low sounds; whereas on the other hand from the diminutive size of the harps depicted, the Assyrians appear to have preferred shrill high-sounding sounds.

The harps of Egypt, Assyria, and of the Hebrews, strange to say, are always represented without a post to support the frame bearing the great strain caused by the tension of the tightened strings—the tone consequently could but have been feeble. The Nabla, or lute, resembled somewhat the mandolin, and was provided with a neck, pegs, bridge, sound-holes, and sounding board.

Both Egyptians and Assyrians employed conductors in their choirs and orchestras; those of the former are represented on the wall-paintings clapping their hands, the latter carrying rods or batons in their hands.

* Engel's "Music of the Most Ancient Nations," 164. Proceedings of the Musical Association, 1890-1891.

The Hebrews during their long captivity in Egypt must have become familiar with, and proficient in the music and musical systems of that nation, and in the absence of any hint or suggestion as to the probability of their having any distinctive system or method of their own, it may in fairness be conceded that their system was more or less, if not quite, the same.

The systems of notation of the above nations is not known.

The Music of Modern Egypt, Persia and Turkey in Asia, seems to be founded on the old Arab scale which divided the octave into seventeen notes—third tones—itself probably derived from the more ancient and complete system of the Hindoos, which divides the octave into twenty-two parts.

In the Fourteenth Century the European system of twelve semitones to the octave was known in Persia.

CHAPTER II.

THE MUSIC OF ANCIENT GREECE.

THE Musical Systems of the ancient Greeks comprised (1) Genus or Genera; (2) System; (3) Modes; (4) Modulation; (5) Notation; and (6) Beats.

(1) The Genus comprises Diatonic, Chromatic, and Enharmonic.

(2) The System—an arrangement of tetrachords which varied at different periods.

(3) Modes, or Scales. These were written from the highest to the lowest, the reverse of our method, the latter being retained throughout these pages to avoid confusion.

The historical period of Greek Music commences with the establishment of the Olympian, Pythian, Nemean, and Isthmian games, and was of the simplest kind, the instruments being but rude pipes and lyres.

The second period dates from 750 B.C. to 160 A.D., during which Terpander, Archilochus, Pythagorus, Aristotle, and Ptolemy lived.

The national instrument of Greece was the lyre or phorminx. It had four strings of equal length, but of varying thicknesses; in the absence of a finger board, the strings on being plucked could only produce the notes to which they were tuned.

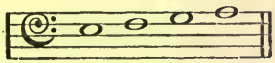
Instrumental solo playing was of purely Asiatic origin, and in this way only was the Greek primitive lyre used; it never accompanied the voice. Before a recitation, a few notes by way of a prelude or introduction were possibly twanged on it, for the double purpose of arresting the attention of the auditory and of giving the pitch to the reciter.

Thus was the lyre, and the method of using it, to the time of Terpander, the Æolian, a native of Lesbos, the then centre of Greek civilization and refinement, who flourished *c.* 780—700 B.C.

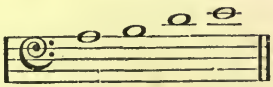
Terpander is usually credited not only as being the first to introduce characters to express musical sounds, with increasing the number of the notes of the scale, the number of the strings on the lyre to correspond to them; but also with introducing great improvements in the manner of using the instrument.

A period of his life was spent in the service of the priests at Delphi; during which time he is said to have composed certain hymns, called nomes or laws, because the words were accompanied with the lyre in a regular and systematic order, a note for every syllable, for the first time.*

At a later period he visited Sparta, the centre of the Dorian civilization, by request, to reform the music. The Dorian scale he found differed from his own, the Æolian; it comprised the tetrachord† formed of the notes E F G A:



whereas the Æolian embraced the tetrachord A B D E:



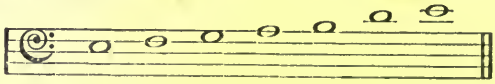
To these notes the strings of the respective lyres were tuned.

It is not, unlikely, therefore, that he conceived the idea of joining the two scales at the common note A; the C in the Æolian portion of this octave scale was omitted, being out of tune, owing to the method in vogue of tuning

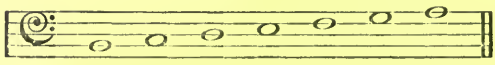
* Plutarch "De Mus.,' 23.

† A tetrachord=four notes, two whole tones, and one semitone.

the lyre, by which the interval from A to C was greater than a major third, whilst the interval from C to E was much less than a minor third. This improved and extended scale of seven notes was applied to the lyre of of the Greeks by the addition of three strings corresponding to the three notes of B D E :

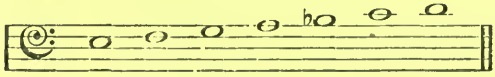


To Sappho, the poetess, *c.* 610, of Mitylene in the Island of Lesbos, has been ascribed the introduction into Greece of the Babylonian scale B C D E F G A:



formed of two tetrachords conjoined at E ; and also the use of the plectrum.*

An effort was made to assimilate the symmetry of this seven-note scale of Sappho's. This was accomplished by lowering B in the highest tetrachord of the seven-note scale a semitone, filling up the gap between B and D, and and omitting the upper E : †



Chromatic and Enharmonic Genus.

The Chromatic genus comprised two semitones and a minor third in succession, thus b c c♯ e.

The Enharmonic genus embraced two quarter tones and a major third in succession,‡ thus b c` c` e.

The scale remained in this form to the time of Pythagoras.

* Plutarch, "De Mus." 16; Rowbotham, "H. of M.," ii. 136. Suidas, art. 'Sappho."

† Rowbotham, ii., 52.

‡ Plutarch, 116. Engel's "Music of the Most Ancient Nations," 164.

The method of using the lyre was still further improved by one Archilochus, *c.* 680 B.C., a poet of Paros, the accredited inventor of the elegy and classic Iambic. Part of his life was spent in the gold-fields of Thasos, a small island in the Ægean Sea. Whilst here he was brought into contact with traders from Tyre, in Phœnicia, from whom he obtained, and learnt how to play, an Iambuca, a triangular-shaped instrument, very closely resembling the Egyptian Sambuca. The method of using this instrument differed considerably from the accepted custom of the Greeks with their lyre, for whilst the Greeks accompanied their songs note for note with the voice, the accompaniment on the Iambuca was absolutely free and independent of the voice, and was played above it, the melody being in the bass.*

Ion, the contemporary of Sophocles, is supposed to have added three more strings, bringing the scale up to ten notes.

Plutarch dates the period of modern Greek music from Thaletas, 670 B.C., the founder of the Spartan choral dances and Sacadas.

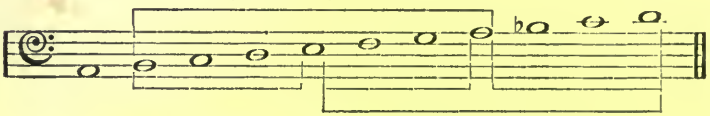
Pythagorean Systems.

Pythagoras, the Metapontum philosopher, was born in Samos B.C. 571, and died at Metapontum 497. In his early life he spent some years in Egypt and Chaldea, from whence the elevation of music into a science, using the term in its acoustical sense, may be dated. To him has been ascribed a further extension of the Greek scale, and the increasing of the number of strings on the lyre to fifteen.

* Plutarch, "De Mus.," cap. 22.

The two systems which bear his name are known as (1) the Lesser or conjunct, and (2) the Greater or disjunct systems.

The Lesser or conjunct system comprised the scale of Sappho, with the proslambanomenos A added below, combined with Terpander's later and improved scale; these scales of Sappho and Terpander overlapped, and were united or conjoined at E and A: hence the term conjunct:

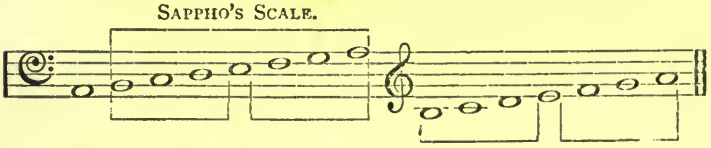
SAPPHO'S SCALE.

TERPANDER'S SCALE.

The tetrachords are marked off for clearness.

The proslambanomenos = the added note, and was an additional note placed at the bottom of the scale, which although used and counted from, was not reckoned as part of a tetrachord, because of the Greek rule which required that each tetrachord should commence with a semitone. Plutarch speaks of the proslambanomenos as having been added in comparatively recent times. It disappeared when the tetrachord Hypaton came into use.

The Greater or disjunct system consisted of Sappho's scale with the proslambanomenos below, repeated at the distance of an octave above, forming a complete scale of two octaves. The second and third tetrachords are disjointed at "a," hence the term "disjunct system."

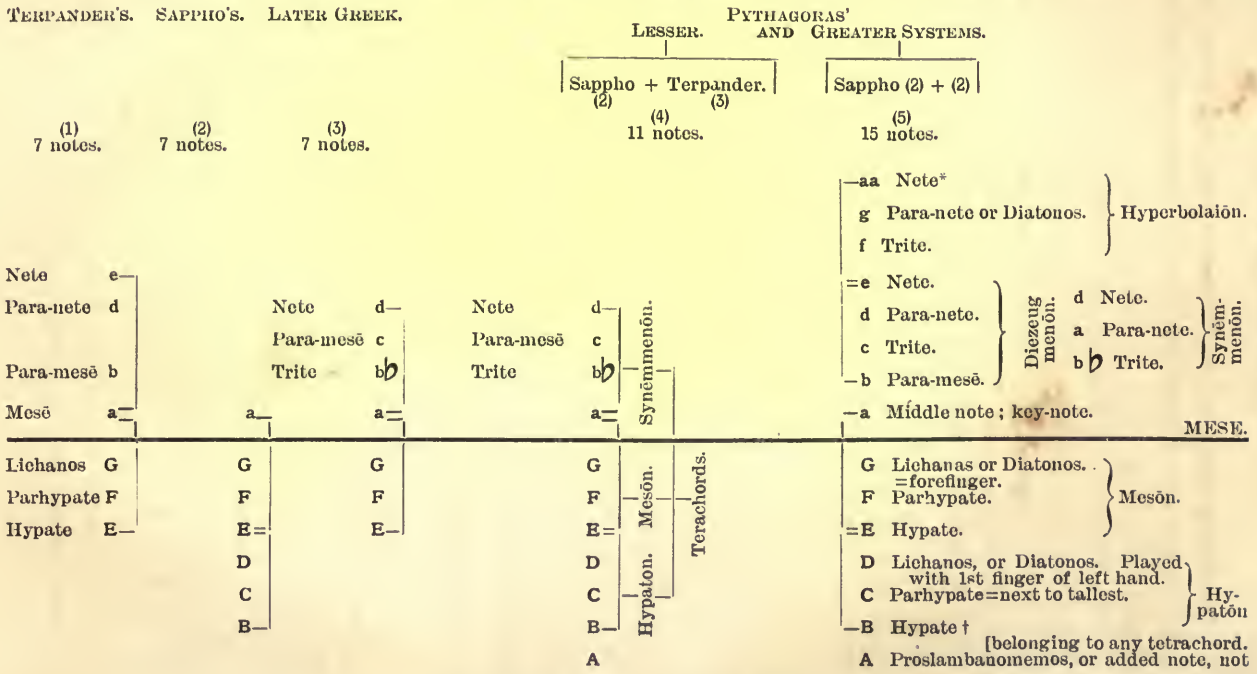
SAPPHO'S SCALE.



These scales were transposed to any pitch required, as is done at the present time.

DIAGRAM A.

COMPARATIVE TABLE OF GREEK SCALES, WITH THE NAMES OF THE STRINGS OF THE LYRE.



* Our highest. † Our lowest.

The names of the strings corresponded to the notes to which they were attuned.

The extension of the scale from time to time, was due to the improvements made in the form and compass of the musical instruments.

Modulation.

Four kinds of modulation, mutation, or change were admitted :*

I. Genus, *i.e.*, from diatonic to chromatic or enharmonic. From chromatic to diatonic or enharmonic. From enharmonic to diatonic or chromatic.

II. System, *i.e.*, from the greater to the lesser or lesser to the greater systems.

III. Pitch, *i.e.*, usually from a closely allied "key" by taking the fourth above or below for the new mese or key-note, which necessitated the addition of but one sharp or flat more or less than required by the mode or key from which the transposition was made, as from Dorian to Hypo-Dorian, or Mixo-Lydian modes.

IV. Melopœia, or change from gay to grave, and so on.

The "key-note," the mese, was forbidden, under any circumstances to be approached by an interval less than a tone.

The term Hyper- / Hypo- > was used to express the interval of a fourth < above / below

as Dorian E {
Hyper-Dorian A = modern sub-dominant.
Hypo-Dorian B = modern dominant.

* Chappell, 103. Euclid, *c.* 300 B.C., p. 20.

Modes.

Mixo-Lydian.	Hypo-Dorian.	Hypo-Phrygian.	Hypo-Lydian.	Dorian.	Phrygian.	Lydian.	
a	b	c	a	e	f	g	
g	a	b	c	d	e	f	
f	g	a	b♭	c	d	e♭	Semitone.
e	f♯	g♯	a	b	c♯	d	
d	e	f♯	g	a	b	c	
c	d	e	f	g	a	b♭	Semitone.
b	c♯	d♯	e	f♯	g♯	a	
a	b	c♯	d	e	f♯	g	
G	A	B	C	D	E	F	
F	G	A	B♭	C	D	E♭	Semitone.
E	F♯	G♯	A	B	C♯	D	
D	E	F♯	G	A	B	C	
C	D	E	F	G	A	B♭	Semitone.
B	C♯	D♯	E	F♯	G♯	A	
A	B	C♯	D	E	F♯	G	

The Hypo-Phrygian and Phrygian modes C and F were taken a semitone higher to avoid the difficulty which A♭ would have caused in the tuning of the lyre.

These modes are to be read upwards as written. The Greeks reversed the order, placing the Proslambanomenos at the top, and read downwards.

The names of the modes were aftewards changed and were known as follows :—

Mixo-Lydian	= the key of	G	minor
Lydian	= ,,	F	,,
Phrygian	= ,,	E	,,
Dorian and Hypo-Mixo-Lydian	= ,,	D	,,
Hypo-Lydian	= ,,	C	,,
Hypo-Phrygian	= ,,	B	,,
Hypo-Dorian	= ,,	A	,,

The names were again altered by Ptolemy in the second century, as will be shown in the next chapter, where a comparative table is given.

Mese.

The word Mese had two meanings :—

(1) The key-note of the Greek modes was called the mesē=the middle-note, because, instead of being the first note of the mode or scale, as is customary with us, it was always the middle note of the octave, or rather of the scale of seven notes; the eighth was not counted, being but a repetition of the first note at a higher pitch. From the mesē or middle note the octave was reckoned by counting four notes downwards, and five notes upwards from and including it ; thus, in the Dorian mode the mesē was G, and the fourth note below and the fifth above it = D, d, and within the range of the scale D—d, the octave of the scale of the Dorian mode lay.

The mesē may be likened to the key-stone in the arch, it holds and binds together the two tetrachords forming the octave.

(2) When a scale of two octaves was employed, the —term mese still being always the middle note—was then

also applied to the note at the junction of the two octaves. Thus, in the Hypo-Dorian mode of two octaves, the note 'a' in the middle of the two octaves extending from A—a—a was called the mesē. The mesē, therefore, was the middle note: first it always represented the key-note, *i.e.*, the fourth note, whether a scale of one or two octaves was employed; and secondly it represented the eighth, that is the middle note of two octaves, when that scale was used.

"All the supposed inscrutability of the Greek modes rests upon the misunderstanding of this simple point—the difference between a complete Greek scale of two octaves and a single octave of the same. It is that difference only which made them an insolvable riddle to Sir John Hawkins, as well as to others both before and after his time." "If the Greeks would but have changed the name of their key-note to one less misleading, when they made their lyres of eight or ten strings, it can hardly be supposed that their system could have remained so long a mystery to the moderns; or that the thorough identity of the Greek with our old minor scale should not have been perceived."*

In either case the mesē—as the key-note in its original place—the fourth note—can readily be found in any mode or portion of a mode or octave; it is always that note, which, counted from and including it, has the interval of a semitone between the second and third notes, both above and below it. The mesē being found, the limit of the mode of which it is the key-note will always be those notes which are comprised within the intervals of a fourth below and a fifth above it. When the scale includes two octaves, the second octave is but a repetition of the lower one, at a higher or lower pitch.

* Chappell's "H. of M.," pp. 84-5.

One continuous proof runs throughout all ancient treatises on Greek music, that every mode or scale was tuned in precisely the same way, viz., always to its own mesē or key-note. For that reason alone it must have been identical as to intervals, just as are modern scales.

The semitones, it will be observed in Diagram A, occupy the first place, that is, they occur both at the beginning of every scale, and of each of the tetrachords forming the scales, the proslambanomenos as stated before not being reckoned as a part of the tetrachord, though used and counted in the scale. The white keys of our modern organs, A, B, C, D, E, F, G, represent the intervals of the ancient Egyptian and Greek diatonic scales.

The diagrams of Alypius, a native of Alexandria, *c.* 360, of Claudius Ptolemy,* Plato, Aristotle, Heraclides Ponticus, Aristoxenus, Plutarch, and others, down to that of Boethius, all alike prove that one Greek scale differed from another in pitch only. "The tones," says Bryennius, "differ from one another in no other respect than in their positions as to acuteness and gravity, as has already been shown." *Καὶ γὰρ οὐδενὶ ἑτέρῳ οἱ τόνοι ἀλλήλων διενηνοχασιν, ει μὴ τῳ τε ὀξυτέρῳ καὶ βαρυτέζῳ τόπῳ τῆς τε θωνῆς καὶ τοῦ ὀργάνον ὡς ἐν τοτς ἔμπρ'ος θεν δέδεικται.*†

Method of Tuning the Lyre.

When tuning the octave, or seven-stringed lyre, the Greeks had a rule that the first string should—no matter what the mode was—be constant; it never varied, somewhat after the custom we have of tuning one of the strings

* Harmonicorum Libri tres ex Codd MSS., ed. J. Wallis, Oxonii, 1682, 4to.

† Bryennius, p. 481, fol., Wallis,s ed.; Chappell, i. 115-116.

of our violins and other instruments of that class to A, from which all the other strings are then regulated. *

The first or lowest string of the lyre is usually taken to have been A, and the other strings were tuned from it. To obviate the difficulty with the Lydian and Hypo-Lydian modes which required A to be flat, these modes, as before mentioned, were taken a semitone higher in F♯ and C♯ minor respectively.

Now, it is obvious that with the first string always tuned to A, one octave only of one mode, the Hypo-Dorian, could ever be applied to the lyre in its entirety. What was done, therefore, was this: that portion of each mode was taken, starting from A to its octave above and applied to the lyre, or rather the strings of the lyre were tuned to correspond with the notes of the particular mode from this point upwards: the portions of each mode below A and above g or a, had of necessity to be omitted. The diagram B. explains this clearly. The vertical lines on the diagram B. show the limited portion only of each mode which it was possible to transfer to the lyre as then tuned.

The positions of the semitones in the modes never varied; they always occurred between the first and second intervals upwards, excluding the proslambanomenos, and between the fourth and fifth, *i.e.*, between the second and third on either side of the Mesē or keynote.

In the diagram, it will be seen that in those portions of the modes between the vertical lines to which the lyre was tuned, the semitones occur in different places in each. Now, if these portions are transposed to the key of A minor, as in diagram C., and compared with the mediæval modes,† the intervals will be found to be identical, but they

* See Marcus Meibomius "Antiquæ Musicæ Avctores Septem Græce et Latine," Amsterdam, 1652.

† Chap. viij.

have not the same names. The names to the modes on diagram C. under (1) are the true Greek names, those under (2) are the false Greek names given to the Mediæval modes or octave scales by Heinrich Loris, of Glarus, who was born 1488, and died March 28th, 1563. It will be seen, the Hypo-Dorian mode excepted, there is no affinity between them as regards names.

The Dorian mode always occupied the middle of the system of modes. With the Greeks, each transposition, which we term key, bore the name of some Greek province.

When the method of tuning the lyre, as above described has been clearly understood, the confusion caused by taking the portions only of the true scales on the lyre, to be complete scales in themselves will be obvious. A careful study of the diagram B. will render any such course an impossibility.

The Romans did not excel in the fine arts, but in construction and in engineering they were without equals. The Etruscans combined music with their sacred offerings and funeral rites.

The Romans having no system of their own adopted the diatonic systems of the Greeks, and for notation, the first seven letters of the alphabet sufficed, but they so misapplied the Greek terms, that to-day they are one of the chief causes of the difficulty in the way of a right understanding and appreciation of the Greek system. Greek music, therefore, cannot be effectually learnt from Roman writers. One who, perhaps more than any other has made "confusion worse confounded," was Boethius, born in Rome 470, died, *c.* 524-6 A.D. His tract on music contains nothing but matters of mere speculation and theory, translated, often erroneously, or at best not fully from Greek writers of high antiquity; his account of the

musical systems of Greece is mere chaos, and, to use the words of the late Sir F. A. Gore Ouseley, Bart., 1825-1889, Mus. Doc., Professor of Music in the University of Oxford, is "no more useful to a modern musician than Newton's 'Principia' to a dancer." Mr. Rockstro* says of Boethius' treatise: "Unfortunately, this work, though once regarded as an indispensable text-book, is too abstruse and unpractical to render any real assistance to the modern student." He is now fortunately accounted as one whose writings are not to be relied on, and yet, until within a few years ago, his tract of mis-readings on music was a text-book at our Universities for obtaining musical degrees.

Of the musical histories of Sir John Hawkins, 1719, d. 1789, and Dr. Burney, 1726, d. 1814, from which the padding of so many similar works has been drawn, the late Mr. W. Chappell, 1809-1888, remarked, alluding especially to their accounts of Greek music: "Sir John had found that he could not understand Greek music: he writes, 'Even at this present day the ablest writers on the subject do not hesitate at saying that the doctrine of the (Greek) Modes is absolutely inscrutable† :' and my impression is, that he had not learnt the Greek language, which would sufficiently account for it. He therefore contented himself with giving "an impartial state of the several opinions, that at different times have prevailed among the moderns. He wrote quite unintelligibly for general readers." Of Burney he said: "Dr. Burney's system of writing upon ancient Greek music was identical with that of Sir John Hawkins, so far as reliance upon the moderns to have done all that was possible towards understanding it."

* History of Music, p. 13.

† History of Music, j. 236, 4to

Of Boethius he said: "The treatise on music by Boethius, upon which Dr. Burney relied, has proved a most unfortunate inheritance for modern Europe. . . . No scholar ever did, or could, learn anything from it; he was unable to teach that which he did not himself understand; he took up music simply as a branch of arithmetic. He had no practical knowledge of music; he could not even tell whether a Greek scale began at the top or the bottom! the words *nete* and *hypate*—'lowest' and 'highest'—bewildered him," which was "inexcusable because he quotes from the treatise on music by Nicomachus, and who fully explains these two words." Having dispensed with the only sound grammars of Greek music, by rejecting the Greek treatises, Burney's difficulties soon began. He describes Greek music as a "dark and difficult subject," and one that had "foiled the most learned men of the two or three last centuries."* "The perplexity concerning the scale, is a subject that required more time and mediation than I was able to bestow upon it†" (!). He had proved in his first volume that old English printing was too much for him to decipher, and what could he do among manuscripts? The reader who desires to know more of the deficiencies of these, until quite recently considered the two standard historians, should consult the introduction to the very able and exhaustive "History of Music," by the late Mr. William Chappell, F.S.A., only one volume of which he was spared, unfortunately for us, to complete, and from which the above is quoted.

Egypt, until the reign of Psammetichus I., was as impenetrable to the Greeks as the interior of China is to Europeans at the present day.

* History of Music, j. 7.
† Ibid, 17.

Psammetichus I., 666—600 B.C., threw Egypt open to the Greeks, who were not slow to avail themselves of the opportunity afforded them; and from this period is to be traced the great advances in all those arts and sciences in which afterwards they so signally excelled.

Can it for a moment be doubted but that the Greeks, having borrowed the lyre, the lute, the flute, and the scale from Egypt, would hesitate to adopt and incorporate into their musical system the "harmony" of that people also? That they did use harmony is certain, but, of course, it was not so fully and completely developed as is our modern system; with the finger board added to their lutes they certainly possessed the means of making or combining any notes.

Pythagoras' system was doubtless greatly influenced by the knowledge he gained of the Egyptian system of music and of the mathematical proportions of their intervals during his sojourn in that land.

Anacreon after Pythagoras speaks of accompanying himself on the 20-stringed Magadis, an instrument borrowed from the Egyptians, and of which we have two splendid illustrations—Bruce's Harp—in the Egyptian tombs.

CHAPTER III.

THE CHRISTIAN ERA.

THE intervals comprised within the octave scales were two semitones and five major tones in the ratio of $\frac{8}{9}$, these consequently sounded very harsh. The first attempt to rectify this was made by Didymus of Alexandria, a musician, A.D. *c.* 60, who placed minor tones in the ratio of $\frac{10}{9}$ below.

An addition to the scale was made by Aristides Quintilianus, *c.* 110, who added Γ below the proslambanomenos.

The greatest of all improvements—which has continued to the present time—was made by Claudius Ptolemy, an Egyptian mathematician, born at Pelusium, who flourished 139-160 A.D., during the reign of Marcus Aurelius Antoninus.

He rejected the Lesser system of Pythagoras and adopted the Greater system, insisting on a scale of not less than two octaves, and corrected the error of Didymus, by making the tones between the fourth and fifth, and between the seventh and eighth—counting in the proslambanomenos, minor tones. This order of major and minor tones produced an effect exactly the same as our true minor mode does when played in tune.

A—B = major tone, $\frac{9}{8}$
B—C = semitone, $\frac{16}{15}$
C—D = major tone, $\frac{9}{8}$
D—E = minor tone, $\frac{10}{9}$
E—F = semitone, $\frac{16}{15}$
F—G = major tone, $\frac{9}{8}$
G—A = minor tone, $\frac{10}{9}$

= 3 major tones, 2 minor tones, 2 semitones = The seven notes of the diatonic scale.

The difference between a major tone and a minor tone is $\frac{81}{80}$. The upper note in a major tone has nine vibrations to every eight of the preceding note, hence a major tone $= \frac{9}{8}$, while in a minor tone the proportions are $\frac{10}{9}$, and $\frac{9}{8} \times \frac{9}{10} = \frac{81}{80}$.

The diminishing of the interval between the seventh and eighth degrees of the octave, from a major to a minor tone, was the first step towards the ultimate substitution of a semitone for a tone between the interval of the seventh and eighth, which in modern music is for some reason deemed a necessity.

Ptolemy's Perfected Greek System.

The Syntonous or Intense Diatonic.

The diatonic tetrachord $=$ { greater semitone in the ratio of $\frac{16}{15}$. / a major tone ,, ,, $\frac{9}{8}$. / a minor tone ,, ,, $\frac{10}{9}$.

The diapason = an octave (*dia*, through; *pason*, all), in the ratio of $\frac{2}{1}$.
The diapente = a fifth (*dia*, through; *pente*, five), in the ratio of $\frac{3}{2}$.
The diatessaron = a fourth (*dia*, through; *tessaron*, four), in the ratio of $\frac{4}{3}$.

Ptolemy limited the number of modes to eight. These eight modes were formed by taking a series of six perfect fourths upwards, or of perfect fifths downwards, starting from, and including, any note of the scale, and then arranging them in alphabetical order, from the note taken, below which the proslambanomenos was placed at the distance of a whole tone.

Example:—Take B, then B to E, E to A, A to D, D to G, G to C, C to F, arranged in alphabetical order from B with the proslambanomenos a whole tone below = A B C D E F G a, the first octave of the Hypo-Dorian mode.

To bring the octaves of all the modes into the middle of the voice, he lowered or transposed the seven scales—the eighth being but a repetition of the first at a higher pitch—a fourth downwards. The diagram B. shows, side by side, the positions of the original and the transposed scales at the interval of a fourth.

Didymus made the Diatonic intervals: $\frac{16}{15} \times \frac{10}{9} \times \frac{9}{8} = \frac{4}{3}$.

Chromatic ,, $\frac{16}{15} \times \frac{25}{24} \times \frac{6}{5} = \frac{4}{3}$.

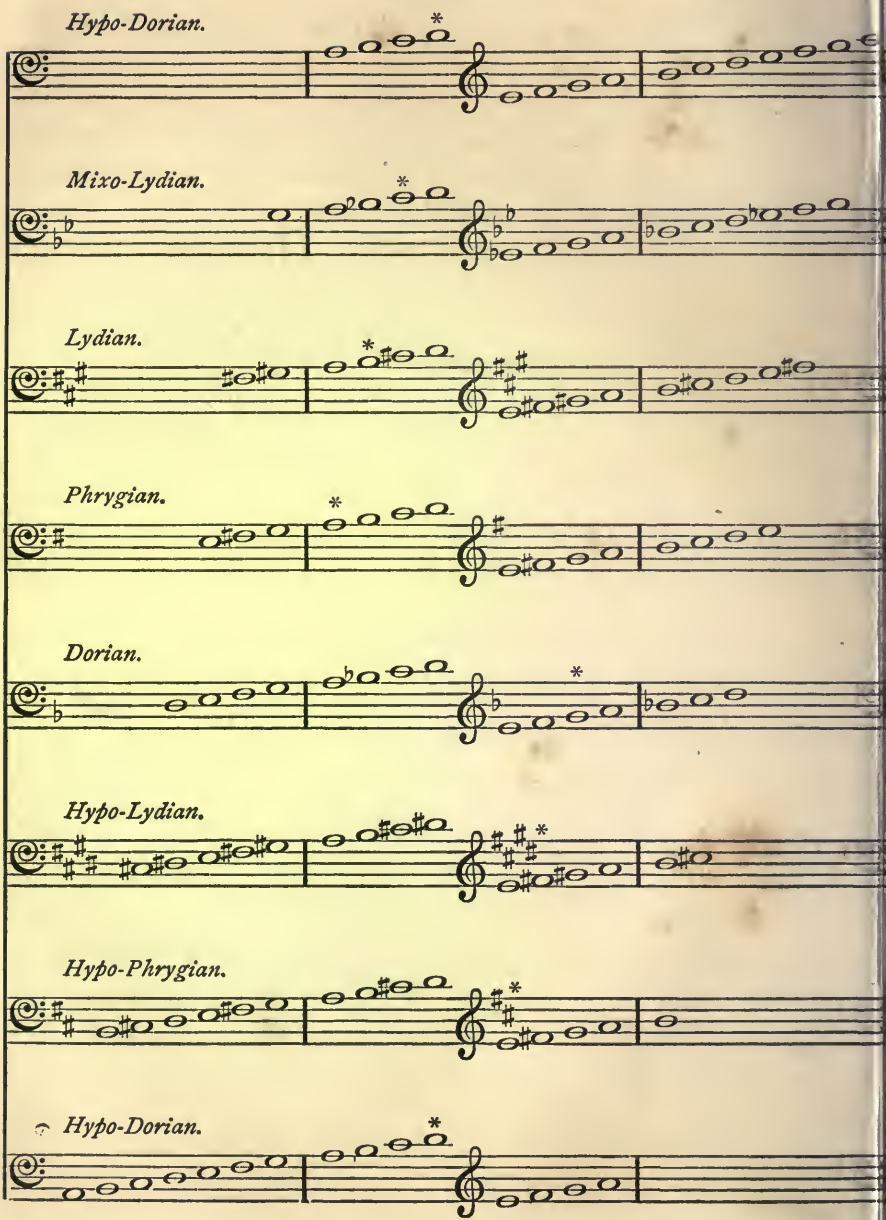
Enharmonic ,, $\frac{32}{31} \times \frac{31}{30} \times \frac{5}{4} = \frac{4}{3}$.

Ptolemy made the Diatonic ,, $\frac{16}{15} \times \frac{9}{8} \times \frac{10}{9} = \frac{4}{3}$.

Chromatic ,, $\frac{22}{21} \times \frac{12}{11} \times \frac{7}{6} = \frac{4}{3}$.

Enharmonic ,, $\frac{46}{45} \times \frac{24}{23} \times \frac{5}{4} = \frac{4}{3}$.

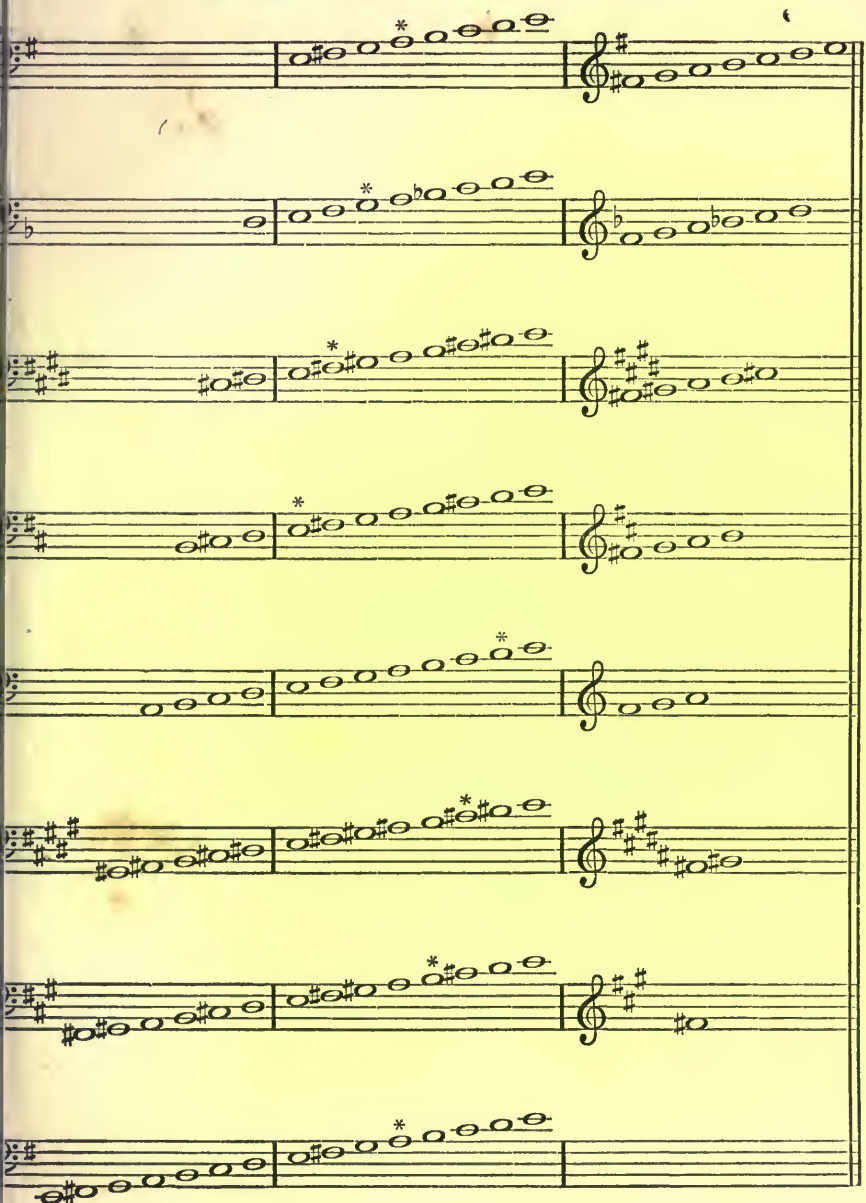
DIAGRAM B.—EIGHT S

ORIGINAL PITCH.

The asterisk denotes th

The rule for finding the mesē, and t

S OF THE GREEK LYRE.

AS TRANSPOSED BY CLAUDIUS PTOLEMY.



or key-note of the mode.

e the key, is described in Chapter II.

This lowering of the strings necessitated the use of either larger instruments or thicker strings.

The vertical lines mark off the portions of each mode that could only be used for accompaniment on the lyre.

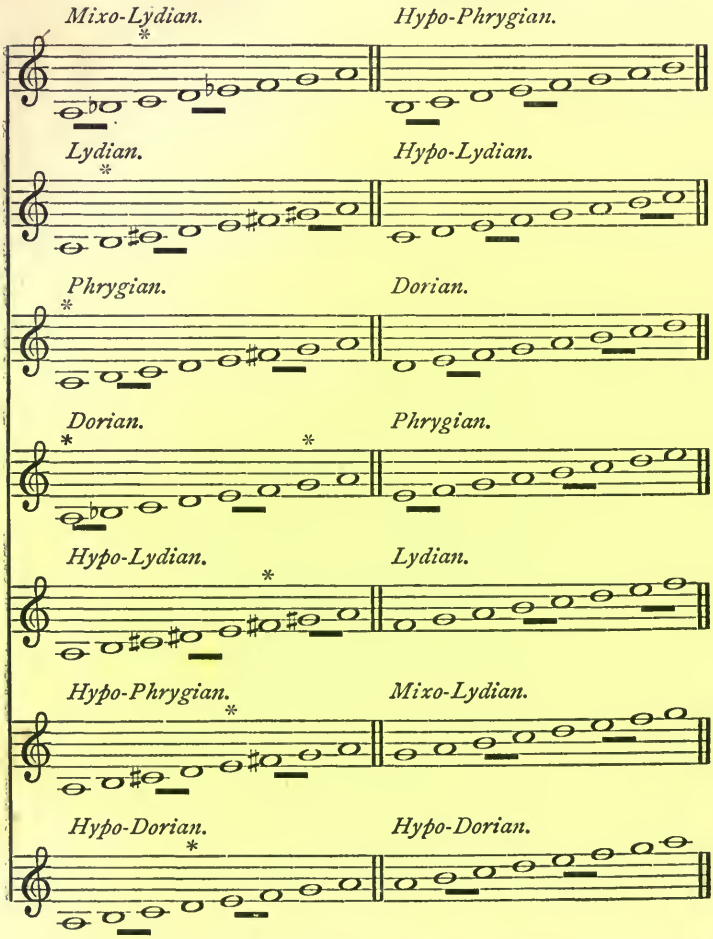
The proslambanomenos still appears as if it were a part of the system, and consequently the semitone in each of the two tetrachords forming the two octaves, seems to occur between the second and third degrees of the scale A B C D, D E F G.

The tendency to move the semitone upwards, and the various attempts made to accomplish this, form not one of the least interesting subjects for observation.

The portions of each scale which could alone be produced on the Lyre, with the same transposed to the mode of A minor, are given on Diagram C on the opposite page, marked respectively (1) and (2). The asterisk marks the Mesē.

DIAGRAM C.

(1) Portion on the Lyre. (2) Transposed to A minor.



The small lines under the notes mark the semitones.

When, however, the number of strings were increased to 15, and methods were found for tuning each string separately, the scales were transposed to the Lyre in their full and complete form.

Chapter IV.

ANTIPHONAL SINGING.

ANTIPHONAL singing was essentially anti-Greek, and was introduced from Jewish and Syrian customs; witness the tradition which ascribes its introduction into the musical services of the Gallican Church in the West, to St. Ignatius of Antioch in Syria, who was martyred about A.D. 107. It certainly appears to have been incorporated into the services of the Church so early as 110 A.D.; for Pliny the younger, who in the second century had been appointed Pro-consul of Bithynia, reporting to the Emperor Trajan concerning the Christians, declared that, having examined many of them, he found the chief of their faults or errors was that they were "accustomed to meet before daylight on a certain day and sing among themselves alternately *secum invicem*—a hymn to Christ as God."

With the Greeks *Anti* as usually applied to music, is in the sense of "accompanying," and therefore in that of the Latin *cum*, "with," and not of *pro* or *contra*. Instead of being responsive, like the chants in our cathedrals—which in Greek would be called Ameibomenai—the Greek *Antiphons* were simultaneous sounds an octave apart, and therefore, like our congregational singing, wherein the voices of men intermingle with those of women and children. The voices of the men, being naturally an octave lower than the others, make the *Antiphons*.

The English word "Counter," as compounded in Counterpart, and in music Counter-tenor and Counter-point, seems better to express the Greek *Anti* than the Latin *Contra* or our "against." Counter-point is simultaneous harmony, or note with note.*

St. Irenæus, a native of Asia Minor, a disciple of St. Polycarp, and Bishop of Lyons in Gaul, *c.* 177 till the end of the century, is said to have introduced into the diocese a Liturgy called by some the Ephesine Liturgy, and there is some evidence that this old Gallican Liturgy was used in the British Isles before and after the coming of St. Augustine in 507.

Sylvester, Bishop of Rome 314-336, is supposed to have been the first to found singing schools at Rome, and in several towns where the Christian religion had become implanted.

During the episcopacy at Antioch of Leontius, the Semi-Arian, *c.* 350, who organised processions through the city, crying out, "Where are they who assert that the Son is as great as the Father?" and singing, "Glory be to the Father, in the Son, and by the Holy Ghost," there were two laymen, of great repute for the sanctity of their lives, afterwards consecrated, the one Flavian, Bishop of Antioch, and the other Diodorus, Bishop of Tarsus. These holy men endeavoured to counteract the heresy of Leontius and his following, and, to further this end, organised counter-processions, going about the city, after the manner of the Arians, carrying lighted tapers in their hands, walking in couples, and singing, "Glory be to the Father, and to the Son, and to the Holy Ghost," thus giving, as the Church originally did, and has ever since continued to, equal glory and praise to the three Persons in the

* Chappell, "History of Music," I., 11.

One, ever blessed, glorious, and undivided Trinity. The method of singing was antiphonal, the men singing one verse, the boys responding. This antiphonal singing was exceedingly popular, and became almost universal. Its popularity is said to have materially aided in drawing the people from their attendance at the heretical services of Leontius, the singing captivating the people.

S. Athanasius, Patriarch of Alexandria, 326, directed the readers of the Psalms in the Churches to use "such moderate inflections of the voice, that it approached more nearly to speaking than singing."*

The chants to which the Psalms were sung must have been written in those scales in use in Alexandria during the pontificate of Athanasius—those of Ptolemy —or else the indefinite sounds which the Greeks termed natural music or unrestricted rhapsodizing, and which a Mahommedan now employs while reading the Koran, or a Buddhist his Scriptures.

St. Basil, Archbishop of Cæsara (Cappadocia), 360, d. 379, was partly educated in Athens, where he became acquainted with the antiphonal method of singing known as the Alexandrian style, which was rather speaking than singing, through the example of St. Athanasius. He introduced the melodies of the chanters of Antioch, and antiphonal singing, mentioning the choir being divided into two parts mutually answering each other, after the model of the singing in Egypt, Lydia, Thebes, Palestine, and amongst the Arabians, the Phœnicians, Syrians, and Mesopotamians, into the 150 sees comprided within his province on sandy Cæsarea. To this and other innovations some of his clergy—notably Sabellus and Marcellus—in 363 objected, and took "occa-

* Confessions x.

sion to incense the Church against him, as having been the author of new devices in the service of God."*

The opposition† came not from conservative congregations, but from Bishops who upheld the Canons of a synod held at Laodicea, in Phrygia, *c.* 360, which decreed that: "Besides the Canonical Psalm-singers who climb into the gallery and sing from the book shall none sing in the Church." Another degree of this synod forbade excess of Psalm-singing—a third the use of unscriptural Psalms composed by private persons.

St. Basil does not mention a town in Europe where antiphonal singing was practised.

Damasus, Bishop of Rome 367-384, introduced into the Western Church the Alleluia, also the custom of chanting, instead of reciting the Psalms, and ordered that they should terminate with the *Gloria Patri.*

St. Ambrose, once the governor of Liguria, and who began life as a Roman magistrate, became the eighth day after his baptism Bishop of Milan, in the north of Italy, 374, being then thirty-four years of age; he died 398. He had a great admiration for St. Basil, whose music and antiphonal method of singing he introduced into Italy.

He is frequently quoted, without any authority whatsoever, as having founded, or introduced, a system of music peculiar in its use and adoption by the Church, fancifully called Ambrosian music, or the use of Milan.

St. Ambrose never claimed such honour; on the contrary, in a letter to his sister, St. Marcelona, he wrote that he merely wished to take upon himself the task of regulating the tonality, and the mode of execution of the

* Hawkins H of M (Novello's Ed.) I. 106, "Vales in Socrates" lib. iv., cap. xxvi.

† Ep. 207, quoted by Zaun, p. 112.

hymns, psalms, and antiphons, that were sung in the church which he had founded at Milan.

There is some probability that his task consisted in the introduction of instrumental music as well as antiphonal singing into the diocese; he also ordained that the psalms and hymns should be sung after the manner of the oriental churches, as St. Basil has done.

The late Mr. W. S. Rockstro in an article on the "Ambrosian chant,"* admits that the attribution of the four authentic modes to St. Ambrose has not been proved.

The system of music adopted by St. Ambrose appears to have reference to the modes of the ancients, or rather those of Ptolemy, being exactly coincident with the seven species of diapason. The 'Te Deum,' set to music, and known as the Ambrosian 'Te Deum," was not the work of St. Ambrose.† The hymn itself did not exist until after the deaths of both St. Ambrose and St. Augustine.

The Benedictines, who published the works of St. Ambrose, judge him not to have been the author of it, and Dr. Cave, though at one time he was of a different judgment, and Bishop Stillingfleet concur in the opinion that the "Te Deum" was not the composition of St. Ambrose nor of him and St. Augustine jointly.‡

Upon the authority of Dom Morin the "Te Deum" appears to have been composed by a Bishop of Remesiana in Dacia, named Nicetas, Nicetius or Nicettus, about the years 398-402.

St. Cyril calls attention to the breach of the Apostolic injunction by allowing women to sing in the Church. He says they should sing with their lips but not let any sound

* Sir George Grove's "Dictionary of Music and Musicians."

† Hawkins, "History of Music," i., 107, n.a.

‡ Bingham's "Antiquities of the Christian Church," book xiv., c. ii., § 9.

be heard, as St. Paul commanded them to keep silence in the Churches.

A French Council, 614, expressly forbids women singing in the Churches.

St. John Chrysostom 380, died 407, was ordained deacon by Meletius, and priest and presbyter by Flavian, Bishop of Antioch. He was consecrated Archbishop of Constantinople 380, in which place he introduced the antiphonal singing and ceremonial of Antioch.

St. Celestine, Bishop of Rome 422-432, is said to have ordained that the psalms should be chanted through at the beginning of, or rather before, Mass, in the course of the year, by taking sometimes one and sometimes another; and they were called the Introits, because sung during the lesser procession of the entrance of the priest, after vesting. They were sung antiphonally, one side of the choir responding to the other. The Great entrance = the rites at the bringing in of the elements, the Little entrance = the rites at the bringing in of the gospel, were taken from Constantinople.

S. Augustine *c.* 597 expresses his delight in hearing the psalms chanted according to musical modes, or scales, having the accompaniment of a musical instrument—probably the Organ or the Chrotta—to regulate and to aid the voice.*

He wrote a treatise on music and rhythm, in six books, which is still extant.

He describes how congregational singing was introduced at Milan in 386:—

"The devout people kept watch in the Church, ready to die with their Bishop, Thy servant . . . Then it was first instituted that after the manner of the Eastern Churches, hymns and psalms should be sung, lest the people

* Confessions, lib. x., cap. 33.

should wax faint through the tediousness of sorrow: and from that day to this the custom is retained, divers—yea, almost all—Thy congregations throughout other parts of the world following herein."

600. St. Augustine, Archbishop of Canterbury, introduced into the Churches of Royal Kent the ecclesiastical chant after the contemporary usage of Rome, very different to all appearances to the writings in the rule of St. Benedict.

633. The Liturgical melodies, as used in Kent, penetrated in Norhumberland, through the means of the chanter of the Church at Canterbury, James the Deacon—but the regular organization of the ancient chants and responds was not established in the provinces of the Anglo-Saxons of the north till after the appointment of Wilfrid to the episcopal see of York, *c.* 664, and under the direction of Æddi, another from Canterbury.

The early Christians, having adopted the antiphonal method of singing in use in Antioch, and introduced it into the West, made use also, there can be little doubt, of the musical system of Greece, as finally settled by Claudius Ptolemy, which was common to the Church, the theatre, and the laity generally.

* Confessions, ix., 7.

CHAPTER V.

SAINT GREGORY THE GREAT—HIS INDIFFERENCE TO MUSIC.

TO St. Gregory I., the Great, Bishop of Rome 590-604, is ascribed by writer after writer, musical historian after historian, none ever quoting an authority in proof of their assertions or in support of them :

(1) The compilation of an Antiphonary.

(2) The founding of a musical school in Rome.

(3) The invention, or arrangement or re-arrangement of a system of music peculiar to the Church.

(4) The introduction of a system of notation by means of Roman letters.

These fictions on examination vanish, like smoke, into thin air.

(1) Did St. Gregory compile an Antiphonary?

Platina, in his "Lives of the Popes,"* who *en passant* does not mention or connect any Antiphonary with St. Gregory the Great, informs us that Melchiades, who was Bishop of Rome, 311-314, ordained that no Christian should keep a fast upon a Sunday or a Thursday, because those days were so observed and kept by the pagans.†

In the year 589 the Council of Narbonne, by Canon XV. solemnly condemned the observance of Thursdays by the Church in any way, because that day was held sacred to Jupiter, and so kept not only by the pagans, but by many Christians also.

* Ed. by W. Benham, Griffiths, Farren, & Co.

† See Council of Laodicœa, Canon 49.

This prohibition remained in force until the episcopacy of Gregory II., who occupied the See of Rome, 716-731. This prelate enjoined the celebration of the sacred rites on the Thursdays in *Lent* only.

How remarkable this last detail is confirmed by the Liturgical books, has been well pointed out by Mons. Francois Auguste Gevaert.* The original Gelasian Sacramentary, written at the end of the seventh century, or, at the latest, in the first years of the eighth, for use in some of the Frankish churches, possibly for the Abbey of St. Denis, —in which the Abbe Duchesne detects Gallican interpolations—does not provide a single Mass for any of the Thursdays in Lent, while all other days in the week have Masses assigned to them, and yet in that ascribed to St. Gregory I., at a time, too, when the observance of these days was solemnly forbidden, we find a Mass assigned to each, and the music apportioned to them is not new, but is borrowed from the Sundays after Trinity, or as they are termed in the Italian service books, "after Pentecost;" they had no place in the Gelasian Sacramentary, it being unknown, as just stated, until the end of the seventh or beginning of the eighth centuries. They appear in the late MSS. of the Gelasian Sacramentary.

The office of the Holy Trinity was composed of Alcuin of York in the reign of Charles the Great; it was not observed at Rome during the episcopacy of Alexander III., 1159-1183, and was even in 1268 in England known as the Octave of the Pentecost. In some churches, the festival was kept on this Sunday, or on the Sunday next before Advent. In 1303 it was established by Bishop Benedict XI., 1303-1304, as it is now observed; or, according to others, by John XXII., Bishop of Rome, 1316-1334, or by Thomas of

* "Les origines du Chant Liturgique de l'église latine," 1890.

Canterbury.* The general observance of the day as a separate festival in honour of the Blessed Trinity according to Blunt was first enjoined by a Synod of Arles, in A.D. 1260.†

The fact that the music was borrowed from pre-existing offices for the Sundays after Pentecost, and not newly composed for these Thursday Masses, is reasonable proof that few, if any, melodies were composed under either Gregory II. or Gregory III. The Masses from which those for the Thursdays in Lent borrowed their music do not, as before stated, appear in the Gelasian Sacramentary, and therefore were not in existence before the close of the seventh century.

St. Gregory I. has left us, in addition to a large number of theological tracts and homilies, a voluminous correspondence, including no less than 800 letters, covering the whole of the public as well as private life during his thirteen years episcopacy.‡ In these there is not a single line, allusion, or hint of any kind respecting either the chant of the Church or of an Antiphonary.

Of ancient writers, there is but one, who attributes the compilation of an Antiphonary to St. Gregory I.—John the Deacon,§ who flourished *c.* 880, that is, about 286 years after the death of Gregory I., whose bare assertions have remained uncorrobated to this day. Cardinal Baronius in the xvj. c. proved the erroneousness of John the Deacon's statements.

There is not an allusion in either the epitaph of St. Gregory, nor the description of the Liber Pontificalis, nor in any biography or eulogium of him. San Isidore, Bishop of Seville, *c.* 570, Bp. 595 or 601, d. at Carthage 636, who

* Walcott's "Sacred Archæology," 590.

† "Annotated Book of Common Prayer."

‡ St. Gregoria opera omnia, Paris, Rigaud, 1705, 3 vols. folio.

§ History of the Life and Miracles of St. Gregory, c. 882.

wrote on Music, and was author of "Etymologiarum"; his contemporary, the Venerable Bede, born 672 or 673, d. 735 in the next century; Paul Warnefried, born 769, d. 814, under the Emperor Charles the Great—do not make the remotest mention or allusion to it. With regard to Isidore and Bede, who were so much interested and concerned with the Liturgy, both of them being also musical writers, the silence is more remarkable and significant.

The attribution of the Antiphonary to St. Gregory I. rests then on the sole and uncorroborated statement of John the Deacon; save this one, all are silent on the matter.

In the Liber Pontificalis, 747, (1) there is no mention of five variable chants for the Mass; (2) nor allusion of a book of chant bearing the name of St. Gregory.

The first record we have of the existence of an Antiphonary is that of Paul I. Bishop of Rome 757-767, who sent one to Pippin, father of Charles the Great, in 760, in which the music for the great festivals is of the same character as that for offices only introduced in the time of Sergius I., Bishop of Rome 687, d. 701, who was a native of Palermo, of Syrian parentage, and became master of the Choir School at Rome. It is to him that Mons. Gevaert attributes the principal part in the composing of these melodies, which were afterwards collected and edited, he believes, by Gregory III., Bishop of Rome, 731-741.

At the Synod of Cloveshoo, 747, while the churches of the Anglo-Saxons are instructed to regulate the liturgical chants, particularly those of the Mass, on the official version sent from Rome, no single allusion is made to, or the slightest hint given of, a book of chants bearing the name of St. Gregory, nor of the five variable chants for the Mass.

The documents from which John the Deacon bases his assertions do not in any particular agree with the calendar

of the time of Gregory I., whereas they do with that of the Roman Liturgy at the beginning of the period 750. In consequence, the compilation of the Roman Antiphonary is antidated more than a century, and therefore, says Gevaert, "if the epithet 'Gregorian' has any real import, it implies that of Gregory II., Bishop of Rome 715-731, or, with more reason to his successor, Gregory III., 731-741."

The so-called Gregorian Antiphonary is said to be a copy of the one made by Adrian I., 790, for Charles the Great, and the Abbé Duchesne, the latest, and one of the best authorities on Liturgical matters, assigns the date of the so-called Gregorian Sacramentary to the viiith century, and attributes it to be the work of Adrian I., Bishop of Rome, 772-795, who makes no allusion to any book of chants.

(2) The founding of a musical school in Rome by St. Gregory I. may, in the absence of one tittle of evidence other than that of the romancing John the Deacon, be dismissed at once as a fable.

(3) It seems hardly necessary to discuss seriously the question of his having invented, improved, or arranged any system of music, peculiar or otherwise to the services of the Church, after what has been stated above; suffice it to add that proof in support of any such theory cannot be adduced. On the contrary, St. Gregory I. appears to have been very indifferent to, and to have taken the very slightest interest in Church music.

In a synod of 570, he says: "In this Holy Church of Rome, which Providence has placed under my direction, it has for a long time been a reprehensible custom, and worthy of note, for the sacred ministry of singers, before entering into Deacon's orders, to devote their whole time to the cultivation of their voices, altogether neglecting their office of preaching and of the distribution of alms; and the Priests,

each cultivating his organ to attain an edifying voice, irritating God, while they please the people with their accents," he decrees "that the Deacons shall not sing at all, except in the recitation of the Gospels in the Masses. As for the chants of the Liturgy, they shall be executed by the Sub-Deacons, or, if necessary, by the clerks of inferior degree."*

(4) The invention of any system of notation cannot be attributed to St. Gregory I. The very Antiphonary which John the Deacon attributes to him is written in neumæ and not in letters. St. Isidore, his contemporary, distinctly declares that no means of recording music existed in his day, and further that, "unless sounds are retained in the memory, they perish, because they cannot be written."† Amalarius Fortunatus, 814, d. 837, a principal ecclesiastic in the chapel of Lewis the Debonnaire, deacon of Metz, who was sent *c.* 830 by Lewis to request of Gregory IV., Bishop of Rome 827-844, a sufficient number of singers to instruct the people, tells us that "neither were there in Gaul or at Rome any books wherein it"—the chant—"had been written."

It is certain, therefore, that the music known under the erroneous terms "Church music," or "Gregorian," was the invention of neither St. Gregory nor any other man, but a recognised system, of gradual growth and development, the heritage of the Church and lay folk alike.

It is, therefore, quite a mistake to suppose that what is called "Gregorian music" is of the age of St. Gregory the Great. The word means nothing more than the "use of Rome." "Nos Gregoriani et nos Ambrosiani," "We who follow the use of Rome, and we who follow the use of

* Gevaert.

† "Nisi enim ab homine memoria teneantur, soni pereunt, quia scribi non possunt."—Bk. iii., "*Origines*," or "Etymologies."

Milan."* It is more than probable, almost certain, that the system of music to which St. Gregory's name has, without any reason, been assigned, came into existence through the introduction of the organ between the eighth and tenth centuries. It was unknown in the days of Hucbald, or of Notker, surnamed Le Beque, the monk and Abbot of St. Gall, in the tenth century. Hucbald distinctly states that his tetrachords have the same succession of intervals, whether taken up or down. Notker, *c.* 845 d. 912, says, in his "De Octo Tonis," that every chant of the first and second tones ends in B, of the third and fourth in C, of the fifth and sixth in D, and of the seventh and eighth in E, which differs much from the law of later times.†

The modern "Gregorian tones," or octave scales, have been changed by altering the position of the semitones in the scales. The music cannot be the same, because the octaves follow in a different succession.

* "Dictionary of Musical Terms," Stainer and Barrett, "Notation.

† "Ibid."

CHAPTER VI.

USES OF THE ROMAN, MILANESE, AND MOZARABIC LITURGIES, EIGHTH TO ELEVETH CENTURIES.

THE use of Milan, there can be little doubt, differed somewhat from that of Rome, not in the musical system—there being but one—but in the method or style of singing. The difference at the present day is striking, especially in the ritual. At Milan, the ancient Greek rule of a note to a syllable appears to have been the custom, whilst at Rome, on the contrary, a string of notes was sung to a syllable, toying with it as long as the unfortunate singer's breath would hold out.

The adherents of the Roman use, if the writers quoted are to be believed, entertained the bitterest ill-feeling and rancorous animosity against those who upheld that of Milan.

From the life of St. Eugenius, *c.* 775, we read* that till his time the use of Milan was more used by the Church than that of Rome. Adrian I., Bishop of Rome, 773-795, it is said, summoned a council for the purpose of decreeing the universal observance of the use of Rome. Eugenius arrived three days after the dissolution of the council; he, however, persuaded the bishop to recall the other prelates who had been present. Having reassembled the council, it was the unanimous opinion of all present that the Milanese and Roman missals should be laid on the altar of St. Peter the Apostle, secured by the seals of most of the bishops, and the doors of the church shut, and that all persons should spend

* Durandus, "Rationale Divinorum Officiorum," Lugd., 1574, lib. II., cap. ii., numb. 5. "Div. Pin. Hist. Eccles.," iii., 6.

the night in prayer that God would show by some sign which of these missals He would choose to have used by the Church; and this was done in every respect. Accordingly in the morning, when they entered the church, they found the Roman missal torn to pieces and scattered here and there, but the Milanese missal opened and intact on the altar. This was taken by the bishops as a sign of the rejection of the Milanese, which was ever to remain only in that church in which it was first instituted, whilst the Roman was accepted, the sign teaching them that as the pages were torn and cast asunder, so was the missal to be dispersed throughout the whole world.*

Common sense would have suggested the opposite view.

The Emperor Charles the Great, 743, died 814, at the instigation of, and being commissioned by, Adrian I., Bishop of Rome, and a synod of Italian Bishops—who passed a decree empowering him in the name of the Church to proceed through the length and breadth of Italy, and to utterly uproot everything, whether in music or ritual, which differed from the practice of Rome†—posted to Milan, and seizing all the chant and hymn books containing the Milanese song, made bonfires of them in the middle of the city. He also carried many with him across the Alps into Gaul, where they were made away with. His agents were instructed to buy up every copy that could be found, or, in default of fair means, to take them by force.‡ Those of the clergy who refused to give up their books were to be put to the sword, and many, both of the higher and lower orders of the clergy, perished in this manner.§ So thoroughly wholesale was the destruction, that when Eugenius visited Milan shortly after

* Hawkins, "H. of M." i., 139. Durandus, "Rat. Divin. Off.," II., ii., 5, Lugd,. 1574.

† Landulphi Senioris Mediolanensis Historia, II., c. 10.

‡ Durandus ex vita S. Engenii, V 2.

§ Land. Sen., II., 12.

these events, with the express purpose of obtaining a copy of of the Milanese chants, he could find but one missal in the whole town, and this had been secreted by a priest in a cave outside the gates. The same measures were taken throughout Lombardy,* and in a few weeks the flourishing empire of the Milanese song was reduced to desolation, and the only fragment that escaped was, according to tradition, this very missal which Eugenius found.

Charles the Great published a law, enjoining, with the severest penalties, that every clergyman in his empire should be perfectly acquainted with the music as sung in Rome, and be able to sing therein when required. In his 1st Capitulary, 788 et a. 789, or Legal Code of the Empire, no less than six statute laws exist, commanding the exclusive use of the Roman chant. Political motives, rather than any regard for art, were the strong reasons which led him to insist on such universal obedience; the doctrine of "one Church, one Empire" became clearer to him as his conquests increased in number, and at last developed into a great maxim of state.

The compulsion of the Roman modes upon Gallican use was, we know, one of the vexations resisted by the clergy of the latter nation under his rule.

The English were so much opposed to having the music of the Church of Rome thrust upon them that twelve hundred lives were lost in defending their national music. Not until Vitalianus sent Theodore the Greek to fill the See of Canterbury in the seventh century could the clergy be prevailed upon to accept it, nor did they do so willingly. The Bishop about nine years later was obliged to send here the principal singers of the Church at Rome, who taught the Britons the Roman method of singing *c.* 679.

* Ibid.

The purity to which the Roman chant is reputed to have been restored by the zeal of Charles the Great, if it ever received any real bleaching, subsisted no longer in Gaul than to the time of Lewis the Debonnaire, his son and immediate heir, who succeeded to the empire of the West in 814; for in his reign the music of the Church was corrupted to that degree, that the Roman chant subsisted only in the memory of those few who had been accustomed to the singing of it; for neither were there in Gaul, nor in Rome, any books wherein it had been written. This strange circumstance is related by Symphosius Amalarius, or as he is more generally called Amalarius Fortunatus, *c.* 814, d. 837, a principal ecclesiastic in the chapel of Lewis the Debonnaire, who himself was sent by Lewis to request of Gregory IV., 827-844, the then Bishop of Rome, a sufficient number of singers to instruct the people.* The Bishop answered "I have no antiphonary that I can send to my son and Lord the Emperor; those we had were sent from hence into Gaul with Walla—a celebrated Abbé of Corbie, cousin-german of Charles the Great, 836-848—when here on an embassy." Amalarius then goes on to say, "When I had been a long while affected with anxiety on account of the difference among the singers of antiphons in our province, and did not know what should be rejected and what retained, it pleased Him who is bountiful to all, to ease me of my scruples; for there having been found in the monastery of Corbie, in Picardy, four books, three whereof contained the nocturnal, and the other the diurnal office, by means of these books I discovered a great difference between the antiphons of our singers and those formerly in use. The books contained a multidude of responsaria and antiphons which they could not sing: among them I found one of those which were ordained

* Hawkins, i. 141, 142.

by the apostolic Adrian. I knew that these books were older than that which remained in the Roman city, and though in some respects better instituted, yet they stood in need of some corrections, which by the assistance of the Roman book might be made of them. I therefore took the middle way and corrected one by the other."

Notwithstanding this labour of Amalarius to reform the Roman chant, Nivers writing in 1683, asserts the corruptions of music were then so great that it was very difficult to say where the Roman chant lay; and after all, the corrections of Amalarius Fortunatus were very ill received.

The book of Amalarius Fortunatus, which more immediately relates to Choral service, or the music of the Church, is entitled "De Ordine Antiphonarii." In this he vindicates the disposition of the anthems, responses, and psalms, which he had made in the Antiphonary, for the use of the churches in Gaul. It seems that in this and the other of his works, he had censured the usage of the Church of Lyons: this drew on him the resentment of two very able men, Agobard, Archbishop of that city, and Florus, a deacon of the same church. The former of these wrote three treatises against his book of offices and his correction of the Antiphonary; and the latter accused him, in the councils of Quierci and Thionville, of maintaining erroneous opinions touching the moral and mystical significations of the ceremonies, and of insisting too strenously on the use of the Italian ritual, which, notwithstanding its authority, had never been generally acquiesced in. From the time of the attack on him by Agobard and Florus, his deacon, we hear no more of him, and there is good reason to believe that immediately after it his memory sank into oblivion.*

* Hawkins, i. p. 142.

Mozarabic Use.

Gregory VII., Bishop of Rome 1073-1085, exhorted, threatened, admonished, and entreated Sancius and Alphonso, the kings of Aragon and Castile, until, fatigued with the importunity of this restless pontiff, they consented to abolish the Gothic service in their churches, and to introduce that of Rome in its place. Sancius was the first to submit to this innovation, and in the year 1080 his example was followed by Alphonso. The methods which the nobles of Castile employed to decide the matter were very extraordinary. First they chose two champions, who were to determine the controversy by single combat, the one fighting for the Roman Liturgy, and the other for the Gothic service. The champion for the Gothic service proved the victor.

The fiery ordeal was next made use of to terminate the dispute. A brazier was lighted, into which both the Roman and Gothic liturgies were cast. The flames at once consumed that of Rome, while the Gothic remained unblemished, intact. Thus were the Gothic rites for the third time crowned with victory, and yet in spite of this the Liturgy of Rome was forced upon them, no doubt by the authority of the Bishop of Rome, and in this instance by the influence of Queen Constantia, who determined Alphonso in favour of the service according to the use of Rome. The authorities for the above are quoted below.*

* Bona, "De Rebus Liturg.," lib. i., cap. ix., 216; Le Brun, loc. citat. 232; Jo. de Ferreras, "Hist. de l'Espagne," tom. iii., 237, 241, 246; Mosh., "Eccl. Hist.," ii., 341; Hawkins, "H. of M.," i. 141 note, Novello's ed. Durandus, "Rat. Div. Off.," II., ii., 5.

CHAPTER VII.

INTRODUCTION OF THE ORGAN.—ITS EFFECTS ON MEDIÆVAL MUSIC.—A.D. 150-1350.

THE Greeks and Romans derived their organs from ancient Egypt.* Water organs are thought to have been invented by Ctesibius the Egyptian, between the years B.C. 284-246, and minutely described by his pupil Héron.

The real home of organ-building in Europe was Constantinople. The primitive organs were furnished with four, six, or eight pipes. About the end of the second century the number of pipes had increased to fifteen or sixteen, [A-P] as shown, not only by engravings on coins, but from the express testimony of a writer to that effect. The probability is that they were in pairs, tuned in unison.

The water-organ with ten pipes, which was a novelty in Rome during the reign of Nero,† who died 68, had become so common and so popular by the time of Honorious. 625-638, that a nobleman's house was considered incomplete without one. Portable organs, which could be carried by slaves from house to house where concerts or musical gatherings were attended by their masters, were also made in great numbers.

* Chappell, i., xvi.

† An Illustration of Nero's organ, on a coin, is given in "Musical Instruments," by the late Carl Engel, p. 24, Chapman & Hall.

A small portable organ was introduced into Gaul by one Gregory, 289, A.D., who learned the use of it in Greece.*

By the time of Constantine the Great, at the beginning of the fourth century, the number of pipes had been increased to twenty-six. Publilius Optatianus, *c.* 324, a court poet of the time, and a master of conceits, wrote a poem on a hydraulic organ, and so arranged his verse† that it exactly represented the appearance of the instrument itself; that is, the first verse is of so many letters, the second of one letters more than the first, the third one more than the second, and so on. The appearance of the verses exactly imitate the gradual rise of the front pipes of an organ, pipe after pipe. To these are appended shorter verses, all of the same length, which stand for the levers, and one is at the bottom of each pipe. There are twenty-six verses in all, and twenty-six levers to match. This shows the way organs were made at this period.

The Emperor Julian, called the Apostate, who died 363, is the reputed author of a Greek enigmatical epigram, the solution of which is evidently the *pneumatic-organ.* It has been literally translated by the late Dr. Rimbault as follows:—"I see a species of reeds: surely from another and a brazen soil have they quickly sprung—rude. Nor are they agitated by our winds, but a blast rushing forth from a cavern of bull's hide, makes its way from below the root of reeds with many openings, and a highly-gifted man, with nimble fingers, handles the yielding rods of the pipes, while they, softly bounding, press out a sound." The *rods* were flat rules of wood. These rules were soon afterwards, and continued for five hundred years to be,

* In Clément's Historie de la Musique, p. 422.
† Illustration, Clement's H. of M., p. 421.

called "tongues," doubtless from the protruding ends which stood out in front.

"All musical instruments are called organs—*organa*," says St. Augustine, born 354, died 430; "not only that great instrument into which the wind is pumped by bellows is called an organ, but also every instrument which is capable of producing a melody."

There is a curious representation of an organ depicted among the sculpture on an obelisk at Constantinople, erected by Theodosius, who died A.D. 383. An illustration is given in "Grove's Dictionary of Music and Musicians."*

St. Jerome, who flourished at the end of the fourth and the beginning of the fifth centuries, *c.* 374, died A.D. 420, described the organ of his day as being composed of fifteen pipes; of two bellows made of two elephants' skins united to serve as a wind-bag.

A pneumatic organ in a Spanish Convent is mentioned as existing in the fourth century. St. John Chryostom and Claudian mention a hydraulic organ.

Cassiodorus, *c* 470, Consul of Rome, in the early part of the sixth century, who died A.D. 560, aged about ninety, at his monastery of Viviers, says:—"The organ is like a tower, made of different pipes, which, by the blowing of bellows, a most copious sound is secured; and in order that a suitable modulation may regulate the sounds, it is constructed with certain tongues of wood from the interior, which the fingers of the master, duly pressing, elicit a full-sounding and most sweet song."

One is mentioned as existing in the most ancient city of Grado, in Italy, in a church of the nuns anterior to A.D. 580. It is described as being about two feet long and six inches broad, furnished with fifteen playing slides and

* ii., p. 576.

thirty pipes—two to each slide—probably either in unison or at a distance of an octave apart.

The organ was used early in the public services of the Church. Platina (in his "Lives of the Popes") says it was first employed for religious worship by Vitalian I., Bishop of Rome 657-672, but according to Julianus, a Spanish bishop, who flourished A.D. 452, it was in common use in the churches of Spain at least two hundred years before Vitalian's time.

St. Aldhelm or Ealdhelm, 668, died 709, Abbot of Malmesbury, and afterwards Bishop of Sherburn, fully describes the organ in his *De Laudibus Virginitatis*. This was most likely the English instrument. At the beginning of the eighth century, he says:—"As he listens to mighty organs, each with its thousand blasts, the ear is soothed by the sound heard from the wind-giving bellows, while the rest shines in gilt cases." He also tells us it was the custom of the Anglo-Saxons to ornament the pipes of their organs by gilding them.

The Venerable Bede, *c.* 673, a contemporary of St. Aldhelm, and who survived him twenty-six years, and died 735, speaks with much minuteness of the appearance, method of playing, and the musical effect of the organ of his day:—"An organum is a kind of tower made with various pipes, from which, by the blowing of bellows, a most copious sound is issued, and that a becoming modulation may accompany this, it is furnished with certain wooden tongues from the interior part, which the master's fingers skilfully repressing, produce a grand and most sweet melody." Dr. Lingard supposes that organs were first introduced into England by Theodore, a native of Tharsus, in Cilicia, who became Archbishop of Canterbury A.D. 669. The instruments had copper pipes, fixed in gilt frames. The organ appears to have been

unknown in Gaul and Germany at the time of Pippin, father of Charles the Great, who is credited with having introduced the singing and ceremonies of the Italian branch of the Catholic Church into Gaul. Being urgently in need of an organ, both as an aid to devotion and as a proper accompaniment and support to the choir, he applied to the Byzantine Emperor, Constantine, surnamed Copronymus, soliciting him to forward one to Gaul. The Emperor complied with the request, and in the year 757 or thereabouts, sent him as a present, in charge of a special embassy, headed by Bishop Stephanus, a Roman, 752-757, a great organ with leaden pipes, which was placed in the Church of St. Corneille, at Compiègne.* Charles the Great also received one from the same monarch. An organ made by an Arabian named Giafar, *c.* 822-826, was also sent to Charles the Great, in all probability the one described by Walafrid Strabo, *c.* 842, as existing in a church at Aachen. The following account of this organ is from Mr. J. F. Rowbotham's "History of Music."† "It was when the Greek ambassadors came to Aachen on a mission from Constantine to Charles the Great, that stories began to spread about the Court of the wonderful instruments they had brought with them; and among others of a complicated instrument made of brazen cylinders, and bull's-hide bellows, and pipes which could roar as loud as thunder, and yet could be reduced to the softness of a lyre or tinkling bell. To gain the knowledge of its construction, Charles the Great sent artizans into the ambassadors' apartments, bidding them to pretend to employ themselves on some other labour, but really to examine the structure of the organ, so that they might make another like it. The organ thus made stood in the Cathedral of Aachen."

* "Grove's Dictionary of Music and Musicians" Art. "Organ."
† iii. 259, 260.

A new era in organ-building would seem to have been inaugurated in the time of Lewis I., the Pious, who died 840, by the arrival of one George, a Venetian, a learned priest, at the court of that monarch in 826. His organs were all water-organs, and were not provided with bellows, a retrogression in the art of organ-building. Most of the instruments throughout Gaul and Germany at this date were built, if not under his direct superintendence, on his pattern. Within a century after George's time, we know not wherefore, the home of organ-building had passed from Italy and Gaul to Germany.

John VIII., Bishop of Rome 872, died 882, writing from Rome to Anno, Bishop of Friesingen, in Germany, said, "Send me the best organ you can procure, and along with it a tutor, for we have none here." England and Germany at this time appear as centres of organ-building, whence the largest organs are said to have come. The bellows, many of which were used to keep a steady flow and pressure of wind—for as one or more were filling, the others were exhausting—now began to be provided with feeders, instead of the old hydraulic arrangement.

Sylvester II.—Gerbertus—established a workshop for making organs in his monastery of Bobbio, and in the ninth century he constructed the organs at Rheims, Aurillac, &c.

The Emperor Theophilas had two large organs constructed in gold.

The great and spacious monastic and cathedral churches of the Romanesque period, with their lofty roofs, were now beginning to cover the land. Immense organs, too, came in vogue, suitable to the large buildings which were to hold them; the small organs were totally inadequate, and would have appeared ridiculous, as well as almost useless, in such vast buildings. But, although the number of the pipes, and

of the bellows to blow them, were greatly augmented, we do not find as yet any addition to the plain diatonic scale, representing the white keys of our present instruments.

St. Dunstan 924, died 988, was a maker of organs, and is reputed to have supplied many great churches with them, including the Abbeys of Abingdon and Glastonbury. One, which he gave to the Abbey of Malmesbury, continued in good playing condition after a lapse of 130 years.

Constantine Porphyrogenete had an organ in his palace.

In the same century Count Elwin presented an organ to the convent of Ramsey, *c.* 980-990, with copper pipes.*

St. Ethelwold, Bishop of Winchester 963-984, made organs with his own hands.†

Mr. Wackerbath,‡ gives a translation from an account in Latin by a monk of the name of Wulstan, who died in 963, of a remarkable tenth-century organ, erected in Winchester Cathedral by Bishop Elphege, who died 951: "Such organs as you have built are seen nowhere, fabricated on a double ground. Twice six bellows above are ranged in a row, and fourteen lie below. These, by alternate blasts, supply an immense quantity of wind, and are worked by seventy strong men, labouring with their arms, covered with perspiration, each inciting his companions to drive the wind up with all his strength, that the full-blossomed box may speak with its four hundred pipes which the hand of the organist governs. Some when closed he opens, others when open he closes, as the individual nature of the varied sound requires. Two brethren—religious—of concordant spirit sit at the instrument, and each manages his own alphabet. There are, moreover, hidden holes in the forty tongues, and each has ten—pipes—in their due order. Some are con-

* Mon. Chron., R.S., 86.

† "Chron. Mon. de Abyndon," Rolls S., ii.

‡ "Music and the Anglo-Saxons," pp. 12-15.

ducted hither, others thither, each preserving the proper point—or situation—for its own note. They strike the seven differences of joyous sounds, adding the music of the lyric semitone. Like thunder the iron tones batter the ear, so that it may receive no sound but that alone. To such an amount does it reverberate, echoing in every direction, that everyone stops with his hand his gaping ears; being in nowise able to draw near and hear the sound, which so many combinations produce. The music is heard throughout the town, and the flying fame thereof is gone out over the whole country." Dr. E. J. Hopkins gives an explanation* and solution of this enigma, which he was the first to unravel, this result having also been published, with an illustration of the instrument, a few years ago in the article on the Organ in Grove's Dictionary. "The musical scale," he says, "simply consisted of the seven diatonic sounds, corresponding with the sounds of the white keys of a modern pianoforte, with 'the music of the lyre semitone, or B flat added. No indication whatever can be traced as to the ranges of the three sets of playing-slides of this Winchester organ. I ventured, in the above article, on the suggestion that the lower row of tongues, which 'the organist' governed, might have consisted of a set exactly corresponding with the two-octave range of Gregory's (*sic*) gamut of sixteen notes, as follows:

'A B C D E F G a b♭ b c d e f g aa;

while the two remaining alphabets entrusted to the two religions brethren possibly consisted each of a set of notes corresponding with those of the Gregorian (*sic*) chants—twelve—making up the exact number of forty tongues in all:

'C D E F G a b♭ b c d e f
C D E F G a b♭ b c d e f
A B C D E F G a b♭ b c d e f g aa;"

* "English Mediæval Church Organ," pp. 17 and 18.

a conjecture the late Sir George Macfarren, in his "Musical History," p. 124, accounts "most ingenious," adding that it "seems fully worthy of adoption." This arrangement may have been made to allow of the accompaniment by descant the precurser of counterpoint; "the ruffling of descant" at York is alluded to as early as 1190. Dr. Hopkins, in the same work, in quoting from an eleventh-century treatise, part of a larger work on "Divers Arts," written by a monk and priest of the name of Theophilus, states, *inter alia*, "the number of notes was seven or eight, and they had one, two, or more pipes each. The handles of the pipes were still called 'tongues,' and each was marked by a letter, according to the rise and fall of the sound, so that it could be known to which tone it belonged. The lettering was an interesting feature, as showing the means taken to secure an agreement between the organ-sounds and the music of the plain chant that was indicated in the same manner."

Guido, 990, d. 1050, speaks of the organ in general terms, as an instrument to which the hymns, Antiphons and other offices were daily sung in Cathedrals and Conventional Churches and other places of religious worship.

There was an organ at Utrecht in 1120, on which the 8th, 12th, 15th, and 17th of every note was made to speak simultaneously by pressing the key of any particular note. This organ is said not to have been unique. It was an effort to attain what we do now with the mixture stops and proved a knowledge of the scientific principle that the theory of music is founded on accoustics. As Diaphony was introduced, so we find provision made for it on the organ by mixture stops. It was provided with pedals.

At the close of the tenth century many organs were in existence in the churches of Germany. The key-board appears to have been invented during the eleventh century.

By the twelfth century the use of organs in our English Monastic and Cathedral Churches had become quite common. Ældred, Abbot of Rievaulx, in Yorkshire, 1147-1167, though not condemning the use of the organ, complained of the thunder of the pipes and the creaking of the bellows, awarded it scant praise, as he also did singing in parts. Baldric, who was living at the same period, defended it after a fashion; he says: "We permit the use of the organ, but do not count it a crime if certain churches are without one."* Gervase, the Monk of Canterbury, describing the burning of the great church in 1174, mentions the destruction of the organ, which stood upon the vault of the south transept, but does not refer to it as if it were an unusual thing in a church. York Minster had its organ in 1190, with its "merry pipings."

There was a water-organ at Malmesbury in the twelfth century.

Bishop Gylbert de Glanville gave an organ to Rochester Monastery before 1214.

Strasburg had one, 1261.

The post of organist at St. Swithin's Monastery, Winchester, was founded in 1316.

There seems to be little doubt that the sharps and flats, in addition to the already existing B flat—the lyric semitone—as represented by the black notes on the modern organ, were introduced in the middle of the fourteenth century. The chromatic key-board does not appear until then. The earliest account in support of this assertion is given on the authority of Michael Prætorius, *c.* 1619.

Long before the close of the fourteenth century we find our great Churches and Abbeys not only plentifully supplied, but in many, as at Lincoln, Croyland, St. Albans, Fountains, Meaux, St. Osyth in Essex, etc., two organs were provided,

* Hopkins, "Med. Church Organ," p. 23. Sacristy, ii., 156.

one being usually placed on the rood-loft, or at the west end. An organ was placed at the west end in a loft or gallery at Meaux, Fountains, and Buildwas. My brother, W. H. St. John Hope, M.A., suggests that the western organs may have been for the choir of the *conversi*, or lay brethren, who occupied the nave. The cathedral of Worcester possessed three organs, the cathedral of Durham five. The best one stood over the choir door, the second on the north side of the choir, the third was used daily. Great organs are mentioned at Ely, 1407, with twelve notes, C to F, exactly the number required for the Mediæval chants; Ripon in 1408; St. Albans, 1450; York again in 1419, 1457, 1469, and 1485.

Organ building flourished also in Kilkenny, Ireland, in the fifteenth century.

For much new and valuable information respecting the early organ see "The Mediæval Church Organ," Dr. E. J. Hopkins, in the *Archæological Journal*, XLV.; "The Organ, its history and construction," by Drs. E. J. Hopkins and E. F. Rimbault, London, R. Cocks and Co., third edition.

Good examples of positive organs also occur in England: on the 3rd label on the North Arcade, from the East, of the nave of Beverley Minster, xiij. *c.*; and on the Minstrel's Gallery on the north side of the nave in Exeter Cathedral, xiv. *c.*

A painting in the National Gallery by Melozzo de Forli, who lived in the fifteenth century, contains a regal which has keys of peculiar shape, rather resembling the pistons of certain brass instruments.*

In the celebrated triptych, by Van Eyck, 1426, "The Adoration of the Lamb," at Ghent, St. Cecilia is represented with a positive organ, with a chromatic division of the finger-

* Illustration in Carl Engel's Musical Instruments, p. 104.

board; also see the celebrated Altarpiece of St. Cecilia, by Raphael, in the Academy at Bologna.

The introduction of the organ into the West, with its limited key board must have caused some modifications more apparent than real. A part only of a mode could be played upon it, as had been the case with the Greek Lyre, and this part, or octave scale, gradually came to be looked upon as a complete mode, instead of but a portion of one; and the chants written in these octave scales with their restricted compass, with the position of their semitones varying in each, in course of time were known as "Gregorian" or the "plainsong" chants of the Church, and eventually were thought to possess some sacred import, which arose not from any canonical authority, but from the exigence of the organ, introduced as an accompaniment to the musical portions of the service of the Church in its early and primitive form.

The earlier organs could not have provided for a large number of notes. Some writers inform us that the levers, which succeeded the slides, varied from three to six inches in width; an octave therefore would, with levers of the former size, occupy a space of at least twenty-four inches in width, and if of the latter forty-eight inches.

Until the tenth century, the organs did not provide for more than two octaves, that is fifteen notes. These corresponded with the white keys only of our present organs and pianofortes, representing the diatonic notes of the scale of A minor.

The Organ in the Temple Church was provided with separate keys for D♯ and E♭, G♯ and A♭, probably at the suggestion of Henry Purcell.

With instruments such as these, it would have been impossible to have done more than accompany the chants in unison. The decreasing of the width of these levers in

course of time allowed the extension of the scale to fifteen notes or two octaves, and eventually to several octaves and the application of Diaphony, Counterpoint, and Harmony became possible.

Transposition from key to key, as in Ptolemy's time, until the organ came into common use, provided with sharps and flats, was of course an impossibility. Hymns and chants were of necessity composed within the restricted compass of the octave scales.

It is a significant fact, worthy of note in support of the above, that until the fourteenth century, the Organistrums* and the Mediæval processional Organs, Regals, or Portatives —so called on account of the ease with which they could be carried about—were furnished with six, seven, or eight notes only. The Organistrums down to the fifteenth century were provided with only eight keys, and it will be found on examination that within the compass of these limited diatonic scales nearly all, if not the whole of, the early chants and hymn-tunes were written. The Regals were sometimes made to be carried suspended from the neck, or rested on the knee of the performer. They were at first played with the thumb of the right hand, the fingers holding the instrument which was blown by the left hand.

The Positive was a small stationary organ of two feet pitch.

Regals were moveable reed organs, Positives were supplied with flue-pipes.

Regals when { single = one pair = one set of pipes.
double = two pairs = two sets of pipes.

In the fourteenth century the art of fingering did not exist. Organists struck the notes with their clenched fists, and were called "Strikers." Engravings of the fifteenth

* The Organistrum dates from the ix c.

century show the keys being pressed down by the fingers straightened out. Subsequently organ-builders provided a key-board which led to the dividing of the fingers; they were, however, still used without the bending of the joints.*

If the mediæval system of octave scales was not the direct outcome of the necessarily restricted compass of the primitive organ, we are driven back to the only other feasible theory, viz., that the portions of the Greek modes which could be applied to the octave lyres were adopted, with their semitones occurring in different positions in each series of octaves. That this was so there is no evidence.

Don Nicola Vicentino, a Roman musician, who flourished 1492-1555, published at Rome, in folio, a work entitled, "L'Antica Musica Ridotta alla moderna Prattica con la Dichiaratione, et con la loro spetie." In it he says, after speaking of various musical inventions, "And so from time to time one added one thing, and another another, as happened a little while ago, when in the organ to the third a *la mi re* above g *sol re ut*, a fifth was formed in e *la mi* with a round b, or as you may call it e *la mi flat*," that is E♭†. Sir John Hawkins, from whence the above is taken, remarks: "This is a very curious anecdote, for it goes near to ascertain the time when many of the transposed keys could not have existed. The author is, however, mistaken in making e *la mi* ♭ the fifth to a *la mi re*, for it is an interval consisting but of three tones. He had better have called it the fourth to b *fa*, which it truly is."

A pair of organs. The word "pair" is here used in the same sense as we apply it in such expressions as pair of tongs, of scissors, bellows, snuffers, virginals, etc. The number of pipes in the organ = a complete set.

* W. H. Cummings, F.S.A.
† "H. of M.," i., 219.

A great pair of organs = a series of pipes sounding in unison with the tenor and bass voices.

A small pair of organs = a series of pipes sounding in unison with the treble voices.

Two pairs of organs = two sets of pipes, are mentioned as belonging to the Temple Church, London, in 1307.

The earliest instance of the employment of pedals, is 1120, at St. Nicholas' Church, Utrecht; they are also mentioned in 1418 in an organ at Beeskow, near Frankfort on the Oder.

The following is a short list of early English organ-makers:—

John Couper: York, 1399-1419.

John Gyse: freeman of the city of York, 1431.

William Fyvell or Nyvell:* freeman of the city of York, 1446-1453.

John Asshwell: freeman of the city of Norwich, 1446.

Arnalt Maynhamber: freeman of the city of Norwich, 1446.

1451. John Roose or Ross: freeman of the city of York, 1463-1469.

George Guant: freeman of the city of York, 1470.

John Lawless: of Kilkenny, 1476.

Edward Boyce: freeman of the city of York, 1478.

William Hall: freeman of the city of York, 1478.

Robert Borton: of Stowmarket, 1485.

Maurice Bironf: freeman of the city of York, 1485, d. 1510.

William Wotton: Oxford, 1486-1489.

1485. John Hewe, or Hugh: freeman of the city of York, 1488.

John Chamberlyn: 1509-1514.

William Lewes: 1514.

* (?) William, organ-maker of Ripon organ, 1453. John Couper of York was paid 12d. for mending the bellows of Ripon Organ, 1399 and 1419.

1485. Thomas Smith: 1514.
Sir William Argall: 1517.
Anthony Duddington: 1519.
James Demps or Dempsey: freeman of the city of York, 1526-1531.
John de John: 1526.
John Howe: of the city of London, 1530-1568.
William White: 1531.
John Vaulks: 1533.
William Beton: 1537-1544.
1537. Willam Treasurer: freeman of the city of York, 1540.
John Hewson: freeman of the city of York, 1545.
Robert of ——: of Crewkern, 1551.
John Chappinton: of the city of London, 1596-1597.
Burwood: 1600.

CHAPTER VIII.

MEDIÆVAL SYSTEM OF MUSIC, EIGHTH TO TENTH CENTURIES.

FOR any Christian of the times of St. Ambrose and St. Gregory to have had the leisure, even if he had the ability, to construct a new musical system, was well-nigh, if not quite, an impossibility. The very empire of mighty Rome was shaken to her foundations by the successive inroads and attacks of the Huns, Lombards, Attics, Vandals, and Avars; to add to these perils, she was herself inwardly disunited, and, as was shortly after proved, "the house divided against itself could not stand."

The Church also was disturbed within by heresies, notably the Manichæans, Priscellianists, Pelagians, and Semi-Pelagians. Every citizen, whether Christian or pagan, was deeply and vitally interested in the one common object of saving the Church as also the empire from the foes that were almost continually pouring in upon and surrounding her. Under such circumstances, and in the absence of any corroborative evidence to the contrary, it is incredible to believe that St. Ambrose, St. Gregory—a man of very infirm and weakly constitution—or any one man, could have accomplished the task of doing, more especially in such a period, that which must have been the gradual outgrowth of many centuries.

The mere suggestion that either St. Ambrose or St. Gregory did so implies either that there was no system at

the time, or that something was wrong with the existing one, for, if otherwise, why construct a new, and in the latter case a questionably better, one? Would it not have been both easier and wiser to have made some attempt to improve, were it possible to have done so, the system in common use at the time, *i.e.*, the later Greek system, as perfected by Claudius Ptolemy in the second century.

If they—St. Ambrose and St. Gregory, and the early Christians in general—did not adopt the musical system of their country, the one in common use, from whence did they obtain one, and what was it? Hullah, speaking of the hypothesis that the music of the primitive Church may have been an altogether original creation, itself the result of a new faith, says it may be dismissed as inconsistent with all experience.*

We are, therefore, forced to the conclusion that the system of music which obtained in the West in the days of St. Ambrose and St. Gregory, as of their predecessors, was also the musical system of the Church. Such a view in no way detracts from the sanctity of the musical services of the Christian Church, whose almost invariable custom it was, not to destroy everything pagan, but, on the contrary, to re-dedicate it to the service of Almighty God.

The heathen temples were frequently re-dedicated in honour of Christian saints and martyrs, thus gradually transforming or fusing the old into the new—witness the Pantheon at Rome, re-dedicated by the Church in honour of the Holy Martyrs and of the Mother of God, in place of its former dedication in honour of the great mother of gods, Cybele; at Constantinople St. Sophia replaced Minerva. Lucius *c.* 156 A.D. is by tradition said to have converted heathen temples into Christian churches.

* "Modern Music," pp. 10, 11.

If this was done with the temples, why should it not have been done with the music?

The Christians early participated in many indifferent heathen customs. They adopted the ram-bearing Hermes as the Good Shepherd, and used Orpheus as a symbol, if not a representation of our Lord. They made sarcophagi of pagan forms, and adopted the basilica, essentially a secular structure as their first church. Prudentius wrote in the language and metre of Virgil. To be "poor in spirit," in the scriptural sense, is not surely of necessity to be poor in intelligence, or even in circumstances. Persons of high rank and culture were among them, to whom Greek music must have been as familiar as any other art. Why should they have forgotten or refused to use heathen melody only, availing themselves as they did of heathen architecture, sculpture and painting, and conforming to heathen customs involving no matters of principle?*

The very same without a doubt was the case with the music of the temples, and many a melody which resounded in honour of Apollo or Jupiter was at a later period requisitioned to extol the praises of the one true God.

Alcuin—Flaccus Albinus—was a native of York who flourished *c.* 725, died 804. Alcuin received his education under Archbishop Egbert, *c.* 700, died 766. Accepting an invitation from the Emperor Charles the Great, he took up his abode in Gaul as director of the educational enterprises of that monarch; it is stated† that it was at his instance the University of Paris was founded in 790 by Charles the Great. He is the first of whom we have any record, who is credited with having arranged and cast into form the octave scales, which were formed upon each of the notes

* Hullah, H. of M.
† Hawkins, H. of M., i., 140 m.

of the diatonic normal scale of A minor, and in which the ecclesiastical music during the above period presumably was written, and also with having divided them into Authentic, derived from αυθεντικός = auctor et magister—the master tone, and Plagal, from πλαγιος, obliquus seu lateralis—subordinate or inferior.

The eight octave scales were placed in the following order:

1st	Tone	...	D E F G a b c d
2nd	„	...	A B C D E F G a
3rd	„	...	E F G a b c d e
4th	„	...	B C D E F G a b
5th	„	...	F G a b c d e f
6th	„	...	C D E F G a b c
7th	„	...	G a b c d e f g
8th	„	...	D E F G a b c d

The line marks the positions of the semitones.

The odd numbers were called the Authentics, and the even the Plagals.

If he did not arrange the scales as above, he is the first to mention them. They were unknown to Cassiodorus in the vjth century.* "He speaks of their being four Authentic and four Plagal modes, and of their ordination by authority, that of Adrian, Bishop of Rome, contemporary with Charles the Great. The whole of the correspondence of Adrian with Charles the Great is in the 'Regista de Jaffa.' There is not a single line relating to the sending of books of the

* Sir G. A. Macfarren, "Six Lectures on Harmony," pp. 10, 11. Dr. Riemann's "Catechism of Music," 89.

Liturgy.* A 'Musical Catechism' by Alcuin is now in the library at Munich."†

Before the xjth century it is certain the number of modes or octave scales were limited to eight. Glarianus, 1488-1563, in his Dodecachordon, treats of twelve..

Notker, in the xth century, is often credited with having called the Mediæval octave scales after the ancient Greek names; he, however, knew nothing of the Greek names, only of the numerals one to eight. The names are very misleading, and were only introduced in the xvjth century by Glareanus.

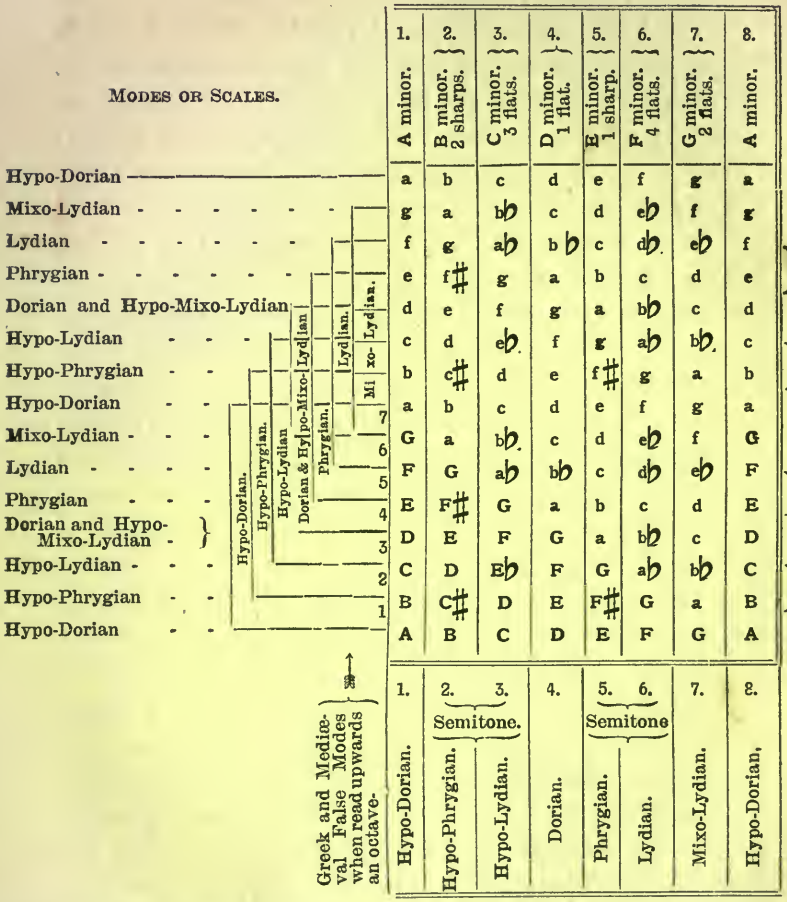
The difference is clear. Ptolemy, referring to the Greek modes, stated that the

Phrygian \
Lydian — mode lay one degree higher than the / Dorian
Mixo-Lydian / — Phrygian
\ Lydian

Being transposing scales, with the semitones always in the same place, this is correct. The Mediæval octave scales being non-transposing scales, the place of the semitones varying in each, the names, therefore, had not the same meaning. The terms Greek or Mediæval false scales or modes are used here synonimously (1) for the portion only of the true Greek scales transposed to the Lyre, and (2) to the Mediæval scales formed by taking an octave upon each of the eight notes of the diatonic scale, the positions of the semitones varying in each; whereas in the Greek and Mediæval true scales or modes the position of the semitones is invariable.

* Pontificum Romanorum, 2nd ed., Leipsic, 319, 1881.
† Private letter from Mr. Rowbotham to the writer.

The following diagram illustrates this:



Read across or upwards from the bottom line for the Greek and Mediæval real Modes.

The false scales or modes will be found on reading upwards in the first column from the note opposite each mode to its octave.

The true modes will be found on reading across from

the note opposite to a mode, or by reading upwards from any mode at the foot of a column.

The transpositions of the false modes will be found in the columns to the right of the first column, starting always from the note opposite that in a line with the name of the mode and reading upwards. The key note of the original scale from which the mode is derived will be the note at the foot of each column.

The positions of the semitones are marked at the foot and on the right side.

The Hypo-Dorian mode is common to the false and real modes.

The Mese or old key-note can always be found by the rule given in Chapter II., being that note which has a semitone between the second and third intervals on each side of it, and the true mode or scale from which it is formed is always the fourth note below the mese, that is the note found at the foot of the columns as above.

The division into the so-called authentics and plagals was made by taking those four modes supposed to comprise a perfect fifth and a perfect fourth—these were called the authentics; those four which were composed of a perfect fourth and a perfect fifth—the plagals. The former were also known as the Harmonic division, and the latter as the Arithmetical. This division, as will be seen was a purely fanciful one, for any one of the plagal modes, excepting the fourth—Hypo-Phrygian—has a perfect fifth in each mode followed by a perfect fourth; and the same with the authentics, with the exception of the fifth—the Lydian mode—all have a perfect fourth followed by a perfect fifth. The division, therefore, it is clear, is imaginary only.

The plagals, in a manner, corresponded to our so-called relative minor keys; they commenced a fourth below and

ended on the tonic of the authentic mode, that is the key-note or old mese. In the East the plagals are counted a fifth below their authentics.

The first note of each octave of the authentics was called the final of the plagals as of the authentics, but the last note was also the final in the authentics only. A piece sometimes began on the final, but it must end on it.

The "Plainsong" chants to which the psalms are occasionally sung in England are frequently irregular, not ending as required on the final, the result is very unsatisfactory, the reason of this being that the antiphon, which followed as a sort of continuation, and always ended on the final, has been almost entirely suppressed in the offices of the English branch of the Catholic Church.*

In the Hypo-Phrygian mode only in the mediæval octave or false scales was the final approached by the interval of a semitone, and that always by descent, and never by ascent.

The term Dominant, in Mediæval music, was used merely to describe the note which in the chants and hymns predominated, and had no other significance. In the so-called authentic modes or octave scales it was always the fifth note unless that note was B, when the sixth, C, was taken; in the plagal modes it was always the third note below that of the corresponding authentic. The pitch of the dominant in practice was usually regulated to suit the voices.

In the modern grammars of Plain-song—a term given to the Mediæval false modes or scales—a melody is fancifully termed:

(1) Perfect, when the melody includes the full octave of a mode or octave scale.

* See Book of Common Prayer "Concerning the Services of the Church" *re* Antiphons cut off.

(2) Imperfect, when the melody does not range the full octave.

(3) Superfluous, when the melody exceeds the octave.

(4) Mixed, when the melody includes or overlaps the Authentic and Plagal modes.

(5) Confinal or Irregular, when the melody does not end on its final.

(6) *Communis perfidis*, when the melody includes the tonic of the Plagal, as well as the tonic of the Authentic, or embraces a Plagal with the octave above its final.

The Authentics, it is claimed, progress smoothly by intervals, whilst the Plagals move by skips.

Twelve signs are made use of: (1) 4 lines; (2) cleffs C and F; (3) ⚑; (4) ■; (5) ◆; (6) Long bar |; (7) Short bar |; (8) Guidon ⚑; (9) ♭; (10) bind or tie ⁀ ⁀; (11) diesis ×.

The interval of the tritone, three whole tones in succession, that is F to B, was forbidden to be used, being too harsh for the ears of our forefathers; to obviate its occurrence, one of the extreme intervals forming the tritone was required to be raised or lowered a semitone. This want does not appear to have been supplied until the tenth century, when, for the first time, the "lyric semitone" B flat occurs, as has been previously noted in the account of the organ at Winchester, and no doubt was to be found on others of this and following centuries. It is also mentioned by Odo, Abbot of Cluny, who died 942.

Hucbald, in the tenth century, in his system of tetrachords, which may or may not have been generally adopted in the tenth and eleventh centuries, has both B flat and F sharp, but the writer is not aware of any compositon of this period in which the latter was made use of.

Guido of Arezzo, in the eleventh century born *c.* 995, died May 17, 1050, introduced B flat in the third and sixth hexachords of the system used by him.

The word "tone" is very often erroneously and synonymously used for and with the same meaning as the word "mode," with which it must not be confounded. A tone is, strictly speaking, an interval, and not a collection of intervals, whereas a mode is.

The class of music which is now known as "Plainsong," can scarcely be of earlier date than the latter end of the eighth century, and it may reasonably be assumed in the absence of any other theory that it came into existence with the introduction of the organ which practically created it, the common and general use of which may be taken to date from this early period, although used here and there, in isolated instances, some centuries before. Cassiodorus who is said by some to have made use of the first fifteen letters of the alphabet in the vijth century, as stated before, knew nothing of the octave modes. The earliest compilation of "Plainsong" of which there is any record is of the latter half of the eighth century, and to this period also, as shown, is assigned the first mention of the scales in the form in which the "Plainsong" is written; and further, that it was at this time the modes were cast into that form in which we know them when the organ came into general use.

There is not a hint, a tittle of evidence, nor a shred of information of any kind which even suggests that any alteration was intentionally made in the form or arrangement of the scale as finally settled by Ptolemy in the second century, if we except the tetrachordal and the hexachordal systems adopted for a short time in the xth and xijth centuries. The use of the restricted organ in its primitive form as an accompaniment to the singing, must have compelled the

arranging of the vocal music in such a manner that it should conform to the exigencies of the instrument, *i.e.*, having no provision for sharps or flats, all transpositions were made without them. If we transpose any piece of music from the old minor mode of A, and then take out all the flats or sharps, the result will be the Mediæval Modes. We find that when the sharps and flats were added to the organ, then do they also appear in the chants and hymn-tunes, or *vice versâ*, for the first time, which affords very strong corroborative evidence of the influence of the organ on the form and use of mediæval scales.

During the eighth and ninth conturies all intellectual development appears to have been stagnant; with the exception of a few rules on decant, in the works of Aurelianus, a monk of the monastery of Résmé in Champagne, *c.* 850, the arrangement and naming of the modes by Alcuin, and a few other writers at the end of the ninth century, little progress, if any, in the art of music was made; none is recorded. Early in the tenth century learning began to flourish all over Europe, especially in the arts and sciences; the study and consequent improvements made in music were soon manifested, notably in England.

Although secular as well as sacred melodies were alike written in these octave scales or modes, it is not asserted that all secular music was restricted entirely to the limited compass and order of them. In England we have proof to the contrary.

CHAPTER IX.

NOTATION.

NOTATION IS TO MUSIC WHAT THE ALPHABET IS TO LITERATURE.

THE earliest System of Notation of which we have any evidence is that of Greece. Aristoxemus, who flourished in the ixth century B.C., is supposed to have settled the characters to express musical sounds.

The notation is given in several works ancient and modern, and it is extremely easy by its aid to read almost any music of these ancient and enlightened people.

The Tables of Alypius, a native of Alexander, who flourished *c.* A.D. 200, is printed in Meibomius "Antiquæ Musicæ," 1652.

Greek Notation is also given with explanations in Dr. Riemann's "Cathechism of Musical History," pt. 2; also end of Hawkins' "History of Music," vol. ii.

In the West the Greek notation was succeeded by the use of Roman letters. It is supposed in the ijth century the first fifteen letters were used—from A to P.

The alphabetical notation, Γ A B C D E F G, a b ♭ c d e f g *a* β ♭ χ Δ, is first mentioned by Odo, Abbot of Cluny, in the "*Dialogus de Musica*;" he died 942. It is formed by taking an octave each way from the mese a; below the lowest octave, the Greek gamma Γ, was placed, and above the highest octave the small Greek letters, *a* β ♭ χ Δ.

At a later period they were reduced to seven. By the viijth century, a system of Neumes was in use formed from

the Punctum, written ' or •, and the Virga, written /. These are usully taken to represent respectively ◆, ■, and ▛; or ¶ and ٩ .

The most common combinations were:

= The Podatus, ¶٩
formed by the Punctum and Virga ¶ and ٩

= The Clivis ٩¶
formed by the Virga and the Punctum ٩ and ¶

= The Torculus ¶¶¶
formed by the Podatus and the Punctum ¶٩ and ¶

= The Porrectus ٩¶٩
formed by the Clivis and the Virga ٩¶ and ٩

= The Scandicus ¶¶¶ formed by the Punctum & Podatus ¶ & ٩

= The Climachus ٩¶¶ formed by the Clivis & Punctum ٩ & ¶

The Punctum is supposed to have been the shortest note, its pitch depending on its being placed high or low above the words.

The Virga, a long note, its pitch being determined like the Punctum.

The Podatus, the second note was the highest.

The Clivis, the first note was the highest.

The Torculus, the second note was the highest.

The Porrectus, the second note was the lowest.

The Scandicus, the last note was the highest.

The Climachus, the first note was the highest.

It is impossible to say whether the ascent or descent is to be by a second, third, fourth,* and so on.

* Grove, "Dictionary of M. and M.," ij., 468*b*.

To accurately translate these Neumes into modern notation with the correct pitch is an achievement the moderns have so far failed to accomplish. The same signs, when repeated at the same level, are seldom made to give the identical pitch, nor the same duration of time. They are generally altered so as to make them fit the melody desired to be represented, witness the attempts made in the otherwise excellent publications of Solesmes, and of the Plainsong and Mediæval Music Society.

Hucbald in the xth century complains of their being only an uncertain guide, a mere help to the memory rather than a real notation. John Cotton in the xjth century says the Virga, Podatus, and Clivis indicate with no certainty intervals of ascent or descent, and expresses a doubt similar to that of St. Isidore of Seville in the vijth century. "The same marks which Master Trudo sang as *thirds*, were sung as *fourths* by Master Albinus; and Master Salamo—in another place—even asserts *fifths* to be the notes meant; so that there were as many methods of singing as teachers of the art."

Guido in the xjth century likewise wrote, "A neume written without a letter or coloured line is as useless as a well with plenty of water but without a rope to draw it by."*

Gabriel Nivers, *c.* 1683-1697, assigns as one of the reasons of the corruption of the Cantus Gregorianus the uncertainty of the method of notation prior to Guido's time, it being very difficult to comprehend, and still more to retain.

Athanasius Kircher—1602-1680—speaking of them, says it was impossible to ascertain the difference between the tone and the semi-tone, which is in effect saying that the whole contrivance was artificial, productive of error, and of very little worth.

* Hawkins, H. of M., j. 168.

Should anyone attempt to elucidate an old M.S. by the aid of a table of neumes he will find, as others have before, that he has ventured into an unknown sea whose depths up to the present have not been fathomed.*

In the xth century we first find the use of one line, sometimes red at others black, on, above, and below which the neumes are written.† A chronicle of the Monastery of Corbie of the xth century mentions the use of the lines to regulate the positions of the neumes. Two lines are found in the xjth century.

One of the earliest instances of the use of red and yellow lines, the red with F before it, and the yellow with C, with the neumes written on, between, above, and below, is of the xijth century.

In the xijth and xiijth centuries two black lines, one red and one yellow, in all four lines occur.‡

The date of the notation of the Winchester Troparium given in Grove's "Dictionary of Music and Musicians,"§ by the late Mr. William Chappell and the late Sir George A. Macfarren, is far too early. A specimen in facsimile with correct date is given in "The Musical Notation of the Middle Ages."¶

Hucbald, Hubald, or Hugbald, a Benedictine monk of the convent of St. Amand sur l'Elnon, in the diocese of Tournay, in Flanders (b. 840, d. 930, and buried in the Church of St. Peter in his own abbey), is reputed to have written a work called "Musica Enchiridiades," in which he cast aside the cumbersome, quasi-intelligible and confusing system of neumes, or neumæ, which prevailed, and sub-

* Ibid. 169.,

† Musical Times, xx., 241, writing of a Table of Neumes recently published.

‡ See Coussemaker, "Hist. de l'Harmonie du Moyen Age," Plates xxiij., xxx., xxxviij.; also Plainsong and Med. M.S. "Notation of the Middle Ages."

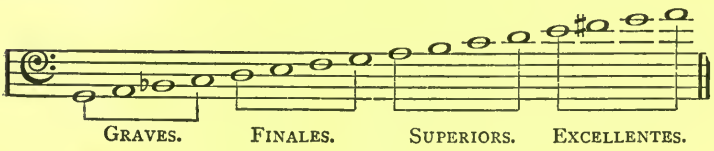
§ Vol. iii.

¶ Plainsong and Med. M.S.

stituted a new method of notation. Coussemaker expressed his conviction that Hucbald did not write the "Musica Enchiridiades;" another monk of the same name, a century later, may have written it.

This system consisted in the arranging horizontally of any number of parallel lines, as the voice or instrument required. To the left, before each space formed by these lines, signs representing certain definite fixed sounds were placed. The scale was arranged as follows:

Graves = G A B♭ C
Finales = D E F g
Superiors = a b c d
Excellentes = e f♯ g a

G A B♭ C D E F g (*a*)
a b c d e f♯ g a (*b*) } =

For the Graves he used the signs
„ Finales „ „
„ Superiors „ „
„ Excellentes „ „

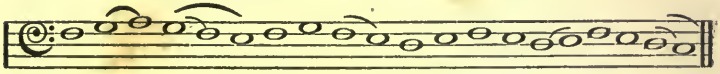
These four tetrachords were detached or disjointed, and the semitone in each occured between the second and third intervals whether read upwards or downwards; the octaves (*a*) and (*b*) therefore do not agree as to the intervals; this difficulty, however, was obviated by placing the letters T = tone, and S = semitone, on the left before the space containing a note, showing clearly whether the voice was to proceed by the interval of a tone or a semitone. The words or syllables were written in the spaces

or intervals—intervalle—between the walls. The lines were not written on.*

EXAMPLE I.—ONE PART.

T (A) a
T (G) da / \ te /num \
T (F) Lau / \ / mi \ de cœ\ /lo \
S (E) \ do / \ e / \ li / \ rum
T (D) \ cœlis / \ cœ / \ lau
T (C) \

The above in modern notation:

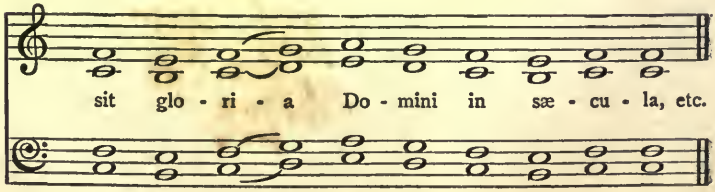


Lau-da - te do - mi-num de - cœ - lis cœ - li cœ - lo-rum lau-

EXAMPLE II.—FOUR PARTS.

T Do \
T / mini \
T sit ria / in \ cula, etc.
S \ glo / Do \ sæ /
T / mini \
T sit ria / in \ cula, etc.
S \ glo / sæ /
T Do \
T / mini \
T sit ria / in \ cula, etc.
S \ glo / Do \ sæ /
T / mini \
T sit ria / in \ cula, etc.
S \ glo / sæ /
T

The above in modern notation:



* "Musica Enchiridiades," c. xiii.

The number of lines were not limited, but were regulated by the extent of the scale used and number of parts required.

Later, certain signs were placed before the spaces instead of the letters inserted above, for clearness.

The Finals D, E, F, G, of Hucbald's system = all the Finals of the eight so-called "Gregorian" or Mediæval false Octave Scales.

The use of a stave of a sufficient number of parallel lines, as in example II., enabled the writing out of the parts in score, of which the earliest instance known is Organum, or rudimentary harmony, described in chapter xi.

"It is obvious that Hucbald's scheme was not what the so-called "Gregorian" scale is commonly supposed and asserted to have been. He made all his tetrachords to have the semitone between the second and third notes, as in D E F G. Hucbald's text is clear enough to anyone not prepossessed with the immutability of the so-called "Gregorian" music, for he says repeatedly that his tetrachords have the same succession of intervals whether taken up or down." *

It will be noted that we now find, for the first time, the semitone has been moved up a degree from the place it occupied in the Greek tetrachords, where it always occupied the first place, for we have seen that the proslambanomenos, though used, was not counted as a part of the scale—it now is.

The position of the semitone is of the utmost importance. It has passed through three stages in the history of the scale :

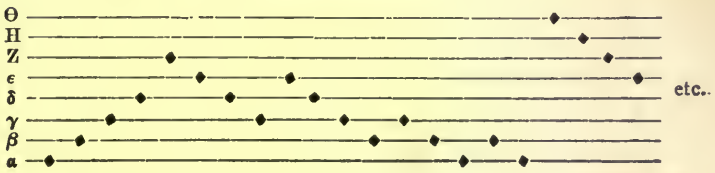
1st 2nd 3rd	with the semitone in the	1st place = B C D E F G A 2nd place = G A B♭ C D E F G 3rd place = C D E F G A B C

* Stainer and Barrett, "Dict. of Musical Terms." Art. "Notation."

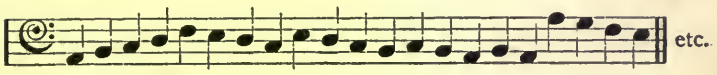
Hucbald's tetrachordal or four-note system was in vogue, in all probability, from the ninth to the eleventh centuries.

About the same time that Hucbald's system of notation came in, another and somewhat similar one appeared, it was described by Vincentio Galilei,* [b. *c.* 1533, d. *c.* 1600], in 1551, and afterwards by Pater Athanasius Kircher, b. May 2nd, 1602, d. November 28th, 1680, in which the spaces were left vacant, and the notes were indicated by dots, or points, written on the lines only, the actual degrees or pitches of the scale being determined by Greek letters placed before the lines of the stave on the left side:

EXAMPLE III.



The same in modern notation is:



The combination of these two systems,† with a limitation of the number of lines and other slight modifications, produced ultimately the system now in use.

Guido Aretino, or d'Arezzo, a monk in the Benedictine convent of Pomposa, between Ferrara and Ravenna, b. at Apezzio *c.* 990, d. 1050, is the reputed author of these four works: ‡

* "Dialago della Musica," p. 37.

† See example from the Monastery of Vallambrosa, Hawkins i. 158.

‡ "Proceedings of the Musical Association," 1878-1879, p. 79.

(1) Micrologus, *c.* 1024;

(2) An Antiphonary, *c.* 1024;

(3) Letter to Monk Michael;

(4) A small tract entitled "De sex motibus vocum a si invicem et divisione earum."

He unquestionably did much to advance the art of music, both in theory and in practice.

He did not invent:

(1) The staff;

(2) The shape of the pointed notes;

(3) The placing of the signs or notes between as well as on the lines;

(4) The hexachord;

(5) The monochord;

(6) The so-called Guidonian hand;

(7) The use of the syllables UT, RE, MI, etc.

(8) The two coloured lines.

The late Professor Sir F. A. G. Ouseley, Bart., Mus. Doc., truly said:* "They would give the world at large to suppose he well-nigh revolutionized the art of music, not only by the excellent schools of music which he undoubtedly did set up, but also by several inventions, such as the system of hexachords, principles of solmization, Guidonian hand, of all of which he is not the originator."

Fetis, b. March 25th, 1784, d. March 26th, 1871, in his "Biographie des Musiciens," proves from Guido's own words that none of these inventions were his in reality, though many of them were adopted by him, and all were discoveries of his time.†

In consideration of Guido's contributions to musical art, many of the Italian writers of the seventeenth century re-

* "Proceedings of the Musical Association," 1878-1879, p. 79.

† "Proceedings of Musical Association," 1878-1879, p. 79.

garded him as the restorer, if not the inventor, of musical science. At all events, few modern thinkers will be inclined to depreciate the great value of his services. Those who look with scorn and contempt at all efforts to trace the origin of music to the period of mythical existence, and who believe in the tangible, will readily admit that the reality of musical art began with Guido.

The syllables UT, RE, MI, FA, SOL, LA, SI, are said to have been taken from the first lines of a Latin hymn to St. John the Baptist:

> "UT queant laxis, REsonare fibris
> MIar gestorum FAmuli tuorum
> SOLve polluti LAbii reatum.
> Sancte Iohannes."

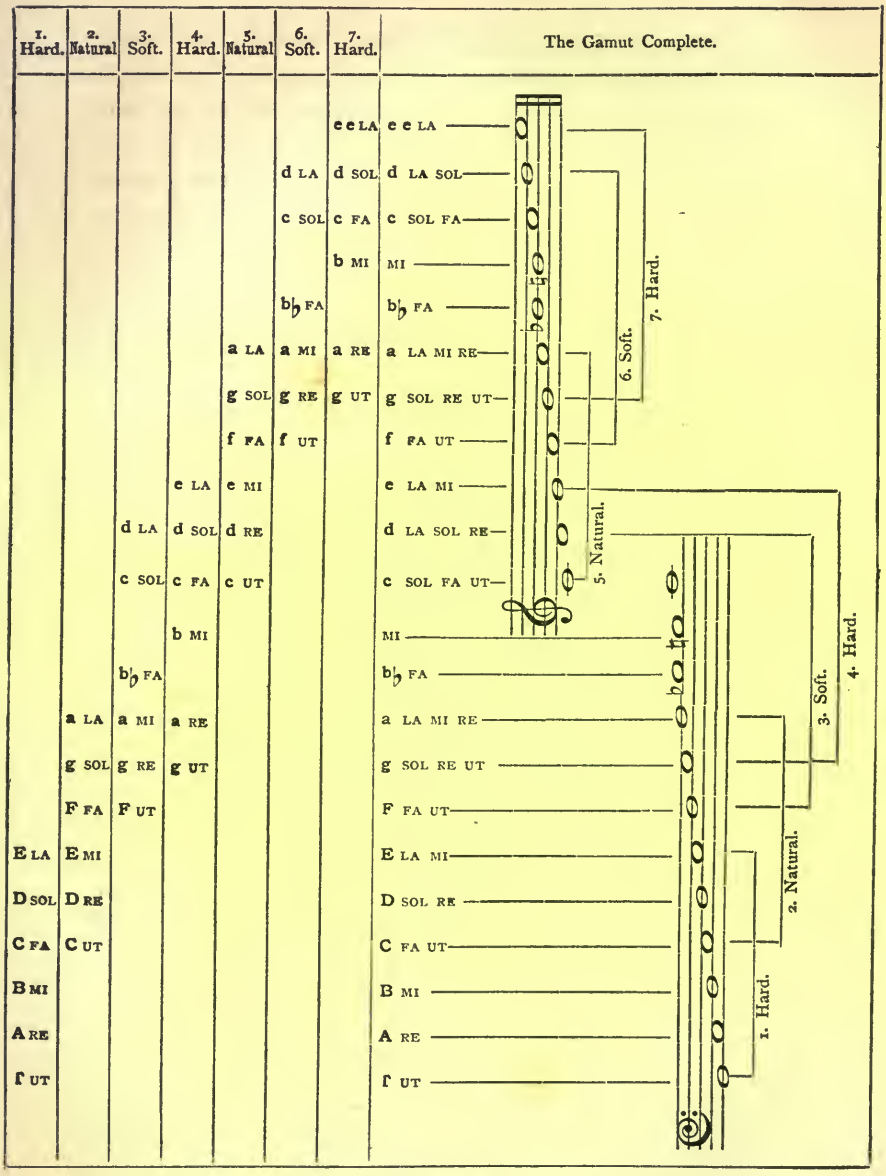
The last syllable, SI, is generally supposed to have been added by Ericus Puteanus, a Flem, *c.* 1600.

The hexachordal system, erroneously ascribed to Guido, was arranged as on diagram D, with the solmization or syllables UT, RE, MI, FA, SOL, LA apportioned to the notes of the respective hexachords. The position on the scale of any note could thus be at once determined.

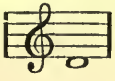
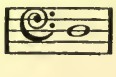
This system is built up of seven hexachords: three upon G, the hard = 1, 4, 7, two upon C, the natural = 2 and 5, and two upon F, the soft = 3 and 6. The position of the semitone in each, whether read upwards or downwards, is always between the 3rd and 4th instead of the 2nd and 3rd as in Hucbald's tetrachordal system; having been moved a degree higher, *i.e.*, to the third place, it thus always fell between MI and FA.

DIAGRAM D.

TABLE OF HEXACHORDS.



Example.

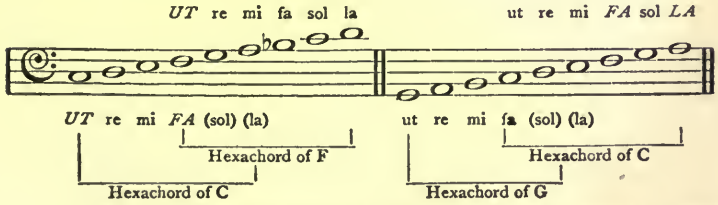
D, la, sol, re =  D, sol, re =  and so on.

B occurs in the 1st, 4th and 7th hexachords above, and was called *b* durus = hard.

B♭ occurs in the 3rd and 6th hexachords above, and was called *b* molle = soft.

These hexachords embraced a compass of two and a half octaves. From the sign *Γ* being placed below the old proslambanomenos* it was called "gamma-UT," hence the term "gamut." The first eight letters were written in in capitals, the next in italics, and the remainder in smaller italics. If a song or melody was limited to the extent of any one hexachord, the solmization — that is, adapting the syllables UT, RE, etc., to the sounds required—was clear and apparent. But if this limit was exceeded, and the melody included part of another hexachord, a change in the syllables—"mutation," as it was termed—took place.

Mutation or transposition was only possible from C to F, F to C, or C to G, G to C, the sub-dominant, the dominant, and the octaves, owing to the presence of B♭ in the third or F hexachord, and B♮ in the fourth or G hexachord.

The mutation usually took place at "re" in ascending, and "la" in descending. At the point of mutation—that is, at the junction of the two hexachords—the syllables changed from the former to the latter; examples:

UT re mi fa sol la
ut re mi FA sol LA
UT re mi FA (sol) (la)
Hexachord of F
Hexachord of C
ut re mi fa (sol) (la)
Hexachord of C
Hexachord of G

The pitch of any note could be immediately known by a knowledge of the formation of the hexachords; for instance if sol, re, ut, was the note, the pitch of which was required,

* Aristides Quintilianus uses it as early as 110 A.D., and St. Odo in the tenth century. *Mus. Times*, xxx., p. 77.

it was obvious, from the diagram D, that it could only be G in the fourth hexachord; the size and form of the letter also determined the pitch and number of the hexachord to which it belonged. The only place where any difficulty might arise was with regard to FA UT, which is in the second hexachord C, and in the third and sixth F.

The use of the musical hand appears to have been to illustrate the hexachords with the mutations.

The hexachordal system, clumsy as it is, was a great advance on the systems up to that time known, and most successful in the elucidation of the mediæval modes so long as they continued in general use, It was absolutely impossible in these modes to show, with anything like clearness or accuracy, the proper answer to a given subject in a real fugue excepting by this solmization, in which it was requisite to make the answer a strict one, that the solmization in one hexachord should exactly correspond with the subject in another—otherwise it was no true answer, but merely "limitation"; UT should answer UT, RE RE, in whatever hexachord selected.

The system of hexachords continued from the commencement of the xjth to the xvjth c., or beginning of the xvijth c., when our present tonal system of the octave, through the influence of the chord of the dominant seventh, came into existence.

During the xijth century the stave of four lines, as used at the present day for the miscalled Gregorian music, had become quite common; they were usually red. A stave of twelve lines was also in use at the time.

The necessity of a clef, or key, to show what the notes on the lines and in the spaces represented, was supplied as early as the xth century, but they first appear as fixtures in the xvij. century. Two clefs, one representing C and

the other 𝄢 F, were probably the first adopted, and the notes that were written on the lines or in the spaces, on or before which either the one or the other clef was placed, corresponded to that note. To obviate the use of ledger lines, these clefs were moved up or down the staff as required, and provided for all the transpositions then possible. In fact, excepting to the mode a fourth above or fifth below, by the use of B♭, transposition was an impossibility, so also was the alteration of any individual note, other than by B♭, until the introduction of sharps and flats in the next century.

Ledger lines were rarely used as early as the xvth. century, though they are occasionally found in the xvjth. century.

Some attribute the naming of the notes to Walter Odington, a monk of Evesham in Worcestershire, they are mentioned in a treatise attributed to him written in 1220. There were probably two of this name as it is found as late as 1316.

In 1600, lines drawn through the two staves of the treble and bass occur, hence the term score.

Thorough or figured bass first made its appearance in printed books *c.* 1600; the usual rules were:

(1) The absence of any figures signified the common chord.

(2) A 6 signified the chord of the sixth, sometimes written $\frac{6}{3}$.

(3) $\frac{6}{4}$ signified the chord of the six-four.

(4) Accidentals were placed by the side of the figure representing the intervals requiring them.

(5) A stroke through a figure signified a sharp.

(6) Accidentals by themselves affected the third only.

Equal temperament was introduced at the end of the xvijth century, about which period the distinction between

the ♯ and ♮ was made, the sharp no longer being used to contradict the flat, nor the flat the sharp.

In the xviijth century sharps and flats appeared at the signature, and all accidental sharps and flats—previously left to the discretion of the performer—were marked in the copy.

The first printed notes were in outline. Square notes were gradually superseded in England by solid oval or round ones during this century.

CHAPTER X.

POLYPHONIC MUSIC.

ANTIPHONY, CONCENTUS, ORGANUM, FABURDON, AND COUNTERPOINT.

Antiphony.

ANTIPHONY, Omophony, or the alternate responsive singing of two choirs in unison or octaves, was at an early period followed by the simultaneous singing of the two parts, the precursor of modern Harmony.

The first known definition of Harmony is that of St. Isidore of Seville in the vijth century: "Modulatis vocis, et concordantia plurimorum sonorum, et coaptatis."

The Ven. Bede, in the viijth century, speaks of Concentus, Discantus, Organum, and further alludes to the subject as follows: "As a skilful harper in drawing up the cords of his instrument tunes them to such pitches, that the higher may agree in harmony with the lower, some differing by a semitone, a tone, or two tones, others yielding the consonance of the fourth, the fifth, or octave; so the omnipotent God, holding all men predestined to the harmony of the heavenly life in His hand like a well-strung harp, raises some to the high pitch of a contemplative life, and lowers others to the gravity of active life," and he thus continues, "giving the consonances of the octave, which consists of eight strings; . . . . the consonances of the fifth, consisting of five strings; of the fourth, consisting of four strings; and then of

the smaller vocal intervals, consisting of two tones, one tone, or a semitone, and of there being semitones on the high as well as the low strings." *

Canon Kingsley in "Hereward" quotes from an ancient Latin version of the contemporaneous Anglo-Saxon chronicle of the deeds of the last opponents of our Norman invaders. Hereward and two of his companions disguised themselves as minstrels, in order to gain admission to a marriage feast in the castle of the King of Cornwall; and to maintain their assumed character they sang, sometimes separately and sometimes according to the manner of the Gervians, together in three parts. These Gervians were the residents of our Eastern Counties, and Hereward himself—a native of Bourne, in Lincolnshire—was familiarly versed in all the arts, civil as well as military, of his compatriots.

Concentus.

Concentus was the term for the agreement of the voice with an instrument.

Organum.

Organum was the name given to an added melody sung a fourth or a fifth below a given melody called the Canto firmo or vox principalis.

Descantus.

Descant or Discant signified the art of singing an improvised melody to a fixed song. Morley,† b. 1557, d. 1604, speaks of it as "a word usurped of the musitians in divers significations—that it is generally taken for singing a part extempore, on a playne-song; so that when a man talketh of

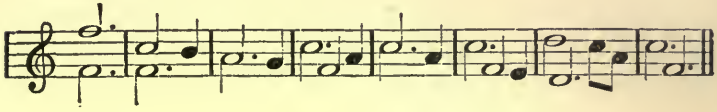
* Bede "Presbyt. Opera," vol. 8, p. 1070, fol. Basileæ, 1563; or "Coloniæ Agrippinæ," vol. 8,, p. 908, fol. 1688.

† Morley "Introduction," p. 70.

a descanter, it must be one that can extempore sing a part upon a playne-song." The ruffling of Descant at York 1190, is alluded to by Hawkins.*

The following example of Descantus of the end of the xjth or the beginning of the xijth century is given on the authority of Dr. Riemann.†

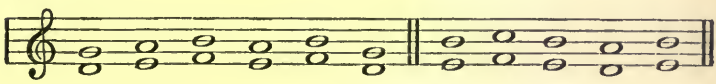
Discantus.



Diaphony.

Diaphony—δὶς, twice ; φωνέω—"twice," was a term used to express the combination of the two parts—the Canto firmo and the Organum or added part, taken together.

Canto ferno.



Organum.

Organum was known at least as early as the ixth century; for Scotus Erigena, who died about 880, speaks of it in his treatise "De Devina Natura."‡

Hucbald in the xth century describes three kinds, in the fourth, fifth, and octave :

(1) Diatessaron symphonia = Fourth.
(2) Diapente symphonia = Fifth.
(3) Diapason symphonia = Octave.

He occasionally made use of seconds and thirds, but preferred the octave to other combinations.

True organum comprised fourths and fifths only, though the unison and octave were used.

* Hawkins "H. of M.," I. 173, Novello.
† "Catechism of Musical History," pp. 24, 25; Augener and Co.
‡ Grove's "Dictionary of Music and Musicians," ii. 603.

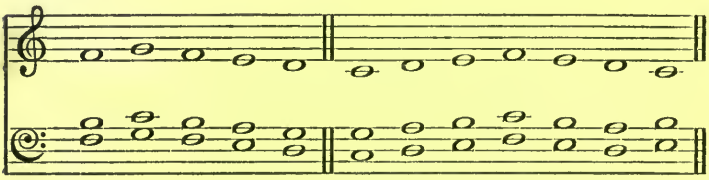
He introduced oblique motion on the principle that "one voice may be permitted to move freely in any direction, so long as the other remains upon the same note;" an exact description of the modern "pedal-point."

Organum was of three kinds:

(1) Diaphony = in two parts.
(2) Triaphony or Triphonia = in three parts.
(3) Tetraphony or Tetraphonia = in four parts.

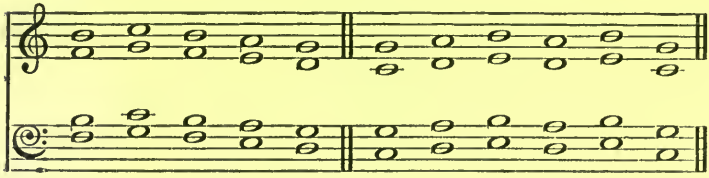
In Triaphony, the organum was doubled in the octave above, being both a fifth below and a fifth above the Canto firmo; it was also known as Organum duplicatum, or triplum =treble.

Triaphony.



In Tetraphony, both the Organum and the Canto firmo were doubled in the octave above, forming a series of fifths-fourths-fifths, or fourths-fifths-fourths.

Tetraphony.



Hucbald ruled that on whatever interval or intervals the Organum began, such sequence should be rigidly adhered to throughout.

The above has by some historians been termed parallel-organum, to distinguish it from that kind which admitted the major seconds and major and minor thirds for the pur-

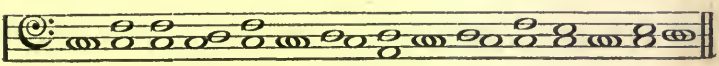
pose of making the fourths move more smoothly. Two thirds were not to appear in succession.

Guido objected to the sequence of five-four and four-five in Triaphony, caused by doubling the Organum in the octave above, and ruled that these two parts should both be sung below the Canto firmo, or by a new method, in which he contrived to keep the parts nearer together as they approached the end of the melody. This device he called

OCCURSUS,

the intervals employed being the unison, seconds, thirds, and fourths.

Occursus.



Geraldus Cambrensis, a Bishop of St. David's, (1146-1220) wrote :—"The Britons do not sing in unison, but in many different parts, so that when a company of people meet as many different parts are heard as there are performers.

"In the northern parts of Britain, beyond the Humber and on the borders of Yorkshire, the people there inhabiting, make use of a kind of spmphonic harmony in singing, but with only two differences or variations of tones or voices. In this kind of modulation, one person [submurmurante] sings the underpart in a low voice, while another sings the upper-part in a low voice equally soft and pleasing. This they do, not so much by heart as by habit, which long practice has rendered almost natural; and this method of singing is become as prevalent amongst these people, that hardly any melody is accustomed to be uttered simply, or otherwise than variously, or in this twofold manner."* This writer emphasised the fact that the Britons sang in harmony.

* "Giraldus Cambrensis Cambriæ Descriptio."

Faburdon, Faux, Bourdon, or False Bourdon.

Faburdon was in use at two different periods. In its earliest form, it consisted in a single note, burden, or drone being held on throughout as a bass to the melody or Canto firmo. It was of purely English origin. It probably preceded Diaphony, which was certainly an advance on this rugged attempt at harmony. About the xivth century the introduction of the previously forbidden intervals, the thirds and sixths, gave rise to the term False Bourdon also, with this different meaning. Any slow psalm tune, written chiefly or entirely in the first order of Counterpoint was called Faburdon.

John Cotton, an Englishman, *c.* 1047-1083, introduced contrary motion for the first time between the Organum and Canto firmo.

De Coussemaker cites MS. treatises published subsequently to that of John Cotton, and before the end of the xijth century; he gives the text, translated into French, and an analysis, from which it seems that during that period the

(1) Use of consecutive fifths had departed.

(2) Thirds and sixths were used as quasi-consonances occasionally.

(3) Passing notes appeared.

(4) The minor third was used at the end of a melody.

(5) Contrary motion prevailed.

Marchetto de Padova, in the xiijth century, *c.* 1274-1309, was the first to enunciate the fundamental law of euphony, that every dissonance should resolve itself into a consonance.

An English MS. by a certain Chilston, preserved in the

* "History of Music," Nauman i., ed. by Ouseley.

† Hullah's "History of Modern Music," pp. 41, 42, gives transcript.

"Manuscript of Waltham Holy Cross,"* probably of the ivth century, gives rules and directions "for the sight of descant . . . . and of Faburdon."

Hawkins gives an example, and, quoting Morley, adds after it: "And though this be prikt a third above the plainsong, yet it was alwaies sung under the plainsong."

Imitation and Inversion occur in a three-part song by one Busnois, who was living *c.* 1445, and died 1480.

Counterpoint.

The word Counterpoint in place of Descant first occurs in the writings of Jean de Muris, one of the greatest musical theorists of the xivth century, and of Gerson, b. December 14th, 1863, d. July 12th, 1429, Chancellor of Notre Dame, *c.* 1370-1408. Counterpoint, Punctus, Contra-punctum, nota contra notam=really, point *with* point, note *with* note, was strictly speaking, written Descant, and was also known as prick-song, owing to the harmony or melodies forming it being written or pricked down, whereas in Descant it was the extemporaneous and spontaneous effort of the singer only.

In the British Museum† there is a round, the well-known "Sumer is i-cumen in," probably the most ancient example of its kind in existence. It is a copy made by John of Fornsete in Norfolk, a monk of Reading in 1220, the original may be several centuries older. This Northumbrian Rota—for such it is thought to be—is a complete specimen of Counterpoint in six parts, including the first strict Canon known, in the unison of one in four, with a pes-foot, drone or burden for two parts, the tonic and the fifth, possibly added by John of Fornsete. It is in the scale of F major, and has the C clef with one flat at the signature. The notes

* Hawkins, "M. of M.," i., 256, Novello's ed.

† Harl., M.S.

are black written on six red-coloured lines. The red, white, or lined notes and the time mark are absent, though all these were in use in the xivth century. The parts of the well-constructed melody enter at intervals of four bars. Thirds, sixths, and passing notes are made use of. It is phrased in the fifth mode or measure of rhythm adopted by Franco of Cologne.

It is a folk-song pure and simple, and the first English song with or without music forthcoming, it is not less than two centuries older than any similar composition yet produced out of England. A *fac-simile* is given in Chappell's "Popular Music of Olden Times."*

Mr. W. H. Cummings, F.S.A., has pointed out the significant fact that the old Northumbrian bagpipes were in the scale of F major, and they also possessed two drones giving F and C the precise bass required for this "Rota," and that there can be little doubt the Northumbrian people were accustomed to sing to the accompaniment of the pipes.

The Arundel M.S., which belongs to the year 1260, formerly in the library of the Royal Society where it long lay unnoticed, has recently been transferred to the British Museum. It contains several compositions in two part and three part Counterpoint, a new proof to the many of the earlier and greater advance of music in England than in other countries.

Adam de Hale, the hunchback of Arras—a Trouvère, *c.* 1240-1285—was the composer of the first comic opera, "Robin Hood and Maid Marian."†

England, as with all advances in the science and art of music, was to the fore in that of Counterpoint. John Tinctoris, a Netherlander, born at Nivelles 1434 or 1435, who died 1520, wrote respecting Counterpoint: "Of this

* Vol. I., pl. i.

† Macfaren, "H. of M.," 361.

new art, as I may call it, the fountain and source is said to have been among the English, of whom Dunstable* was the chief."

In the xvth century England, as the head of a school, preceded both the Netherlanders and Burgundians. During the wars of the Roses, music in England, like the other arts, suffered much, all progress being for the time at an end.

Counterpoint is of two kinds, Strict and Free. Strict Counterpoint dates from about the xivth to the end of the xvjth century, when the Polyphonic styles died out, and the Monodic came in. The main idea on which the Polyphonic style was based, was the melodic relation of two or more real parts. The Monodic, on the other hand, is based on the harmonic relation of two successive chords. The arrangement and treatment of the parts in each was therefore very different; the one was lateral, the other vertical. Strict Counterpoint admitted the Diatonic genus only, and it is not until 1591† that the first instance of Chromatic genus is found.

Counterpoint is simple or florid. Simple Counterpoint is when the Counterpoint and Canto firmo respectively comprise notes of the same length.

Florid Counterpoint when the Counterpoint comprises longer and shorter notes than the Canto firmo.

At first Concords only were admitted; later, Discords, under certain restrictions.

Modern Counterpoint includes five species. The general laws of Strict Counterpoint are clearly and succinctly set forth by the late Mr. W. S. Rockstro in Grove's "Dictionary

* John, of Dunstable in Bedfordshire, a musician, mathematician, and astrologer, died December 24, 1453 (Macfaren gives 1450), and was buried at S. Stephen's, Walbrooke.

† "Construe, my darling," a canzonet by Giles Farnaby, 1591, ed. by W. B. Squire.

of Music and Musicians,"* and those relating to the Free style also ably explained.† The two styles are not antagonistic, as the new progressions made use of in the Free style were unknown to the contrapuntists of the xvjth century. Double Counterpoint is Counterpoint so written that the parts forming it can be inverted without destroying the Counterpoint. It would occupy too much space to enter fully into the subject here, besides being outside the scope of this volume. The reader who desires a complete knowledge of the two styles of Counterpoint cannot do better than consult the articles referred to.

Summary.

Canto firmo=the Melody, or mis-called Plainsong.

Faburdon (1)=a drone, burden, or holding part in the bass.

Organum=an added part a fourth or fifth below the Canto firmo.

Diaphony=the name for the Organum and Canto firmo taken together.

Descant=the art of singing an improvised part or Organum.

Faburdon (2)=the addition of thirds and sixths to the Organum.

Counterpoint=melodies parallel with melodies, at first note with note written horizontally.

Harmony=combination of notes written vertically.

Counterpoint is not now written in more than eight parts.

Canon.

Canon according to Giraldus Cambrensis, Bishop of S. David's, *c.* 1146-1220, was an invention of national growth,

* Vol. iii., 741-744.
† Vol. iv., 742-744.

much practised in the north of Britain from whence it sprung.

Canon is a species of Counterpoint in which the different parts or melodies repeat each other at certain regular intervals, each part commencing a few bars after the previous one has started, the whole forming a piece of perfect harmony.

Imitation.

Imitation resembles a sort of short Canon and is much used in fugal writing.

Fugue.

G. Frescobaldi [1583-1644] was the first to make one musical subject generate another.

Giovanni—Carlo Cesarini, surnamed del Violone, d. 1782, was a celebrated Fugue writer.

Orazio Benevoli, b. at Rome 1602, d. 1672, was the first to write Fugues of any degree of development.

CHAPTER XI.

MEASURABLE MUSIC.

BEFORE the xjth century there was no regularity or method for fixing the exact value of the notes beyond the coincidence of even uniform measures of note against note, etc.

Measured music united melody to metre, and from it sprang Florid Counterpoint, Canon, and other kinds of polyphonic forms.

The first work on measured music is supposed to have been written by Franco, a monk, of Cologne, *c.* 1047-1083, who does not, however, account himself as the originator of the system he explains.

To represent the time value he used the Large or Double-Long , the Long , and Breve ◇.

Perfect or triple time, so called as typifying the Blessed Trinity, was for a time in use only. When duple time was added it was termed Imperfect.

Mode.

To regulate the proportion or measure of the Large to the Long, and the Long to the Breve, the term Mode was adopted.

The Mode was divided into :

The Greater Mode Perfect when a Large = 3 Longs.
„ „ „ Imperfect „ Large = 2 Longs.
The Lesser Mode Perfect „ Long = 3 Breves.
„ „ „ Imperfect „ Long = 2 Breves,

all were written in black notes on a stave of five lines.

For the Greater Mode Perfect the signs ||| ⊙ were used.
Imperfect „ ||| ☾ „
Lesser Mode Perfect „ || ○ „
Imperfect „ || ☾ „

These are supposed to have been introduced by Johannes Tinctoris, 1434-1520.*

Franco confined himself to five measures of Rhythm:—

Spondee = — —
Iambus = ∪ —
Dactyl = — ∪∪
Anapæst = ∪∪ —
Trochee = — ∪

Walter Odington, an Englishman, *c.* 1220—1316, expanded Franco's enunciations.†

Time.

Time signatures ○ = Perfect, ☾ = Imperfect, were introduced about the end of the xiijth century, on the introduction of the Semibreve. The term Time was used to regulate the proportion or measure of the Breve to the Semibreve.

In Perfect Time ○ a Breve = 3 Semibreves, Rest or pause
„ Imperfect Time ☾ a Breve = 2 Semibreves

The terms Time and Semibreve were synonomous.

The notes were written in black with occasional red notes which last when Imperfect, lost one-third of their value if the Time signature ○ was Perfect, and ☾ if the signature was Imperfect.

Prolation.

Prolation regulated the proportion or measure of the Semibreve to the Minim, introduced probably by Phillipus de

* The strokes must be placed before the Circle when the Time signature is also used.

† De Speculatione Musicis.

Vitracio, who died 1360, with the signs ⊙ and ☾ for the Greater and Lesser Prolation respectively. The Rest or Pause for the Semibreve was ▬, for the Minim ▬.

In Greater Prolation ⊙ or ☾, a Semibreve = 3 Minims
„ Lesser „ ○ or ☾, „ = 2 „

The notes were written in white, with occasional red or black notes, losing a proportion of their value as described above.

From above it will be noticed:—

The Number signified the Mode.
The Circle „ Time.
The Point „ Prolation.

Proportion, Augmentation, Diminution.

Proportion, Augmentation, and Diminution, terms used for lengthening or shortening the value of the notes, were also introduced. The various signs for denoting them will be found under their respective headings.

Proportion = $\frac{\text{Diminution}}{\text{Augmentation}}$ = Variations from the Integer or mean Time value.

In the xvjth century the Combinations were confined to:—

○³ or ○ = Perfect Time and Lesser Prolation $\frac{3}{1}$.
⊄ = Imperfect Time and Lesser Prolation $\frac{2}{2}$.
⊄ $\frac{3}{2}$ = Greater Prolation $\frac{3}{2}$.
☾ = Lesser Prolation Common time.

The sign ○ is not found after 1535 to denote triple measure, *i.e.*, Perfect Time.

Coloured notes disappeared when bars came in, which were first used in Score, *c.* xvth century, but were not in general use until the end of xvijth century.

The solid black and red notes were sometimes called full notes, the hollow ones, void.

A note cut in half, as 𝅗𝅥, lost one half of its value.

Notes are also found half black and half white.

The Crotchet = the Chroma, the Quaver = Semi Chroma were now introduced, with the Rests = 𝄽 and 𝄾, these were always solid black.

Writing the notes hollow was termed evacuating, evacuated notes always lost one-third of their value, thus 𝅝 = 𝅗𝅥 𝅗𝅥 instead of 𝅗𝅥 𝅗𝅥 𝅗𝅥

Proportion.

Proportion determined the ratio of two notes one to the other, and was expressed by means of figures and their inversions. Proportion is:

(1) Multiple when the Greater contains the Lesser exactly.

(2) Superparticular when the Greater contains the Lesser, and one exact part of the Lesser remains.

(3) Superpartiens when the Greater contains the Lesser, and more than one part of the Lesser remains.

(4) Multiplex Superparticular = (1) and (2).

(5) Multiplex Superpartiens = (1) and (3).

Examples.

(1) When the Greater contains the Lesser twice it is Duple, as $\frac{2}{1}$ $\frac{4}{2}$, ; three times Tripla, $\frac{3}{1}$ $\frac{12}{4}$; four times Quadrupla, $\frac{4}{1}$ $\frac{16}{4}$, and they are Multiple.

(2) $\frac{3}{2} = 1\frac{1}{2}$, $\frac{4}{3} = 1\frac{1}{3}$, $\frac{5}{4} = 1\frac{1}{4}$ =

(3) $\frac{5}{3} = 1\frac{2}{3}$, $\frac{7}{4} = 1\frac{3}{4}$, $\frac{8}{5} = 1\frac{3}{5}$ =

(4) $\frac{9}{4} = 2\frac{1}{4}$, $\frac{15}{4} = 3\frac{1}{4}$.

(5) $\frac{11}{4} = 2\frac{3}{4}$.

When the lesser contains the greater, the above terms are used prefixing the word Sub=

(2) Sesquialtera $= \frac{3}{2}$
Sesquitertia $= \frac{4}{3}$
Sesquiquarta $= \frac{5}{4}$
Sesquiquinta $= \frac{6}{5}$
Sesquisexta $= \frac{7}{6}$
Sesquiseptima $= \frac{8}{7}$
Sesquioctava $= \frac{9}{8}$
Sesquinona $= \frac{10}{9}$
Sesquidecima $= \frac{11}{10}$
} are Superparticular.

(3) Super-bi-partiens, the Greater contains the Lesser and 2 remain as $\frac{5}{3}$.

Super-tri-partiens, the Greater contains the Lesser and 3 remain as $\frac{7}{4}$.

Super-quadri-partiens, the Greater contains the Lesser and 4 remain as $\frac{9}{5}$.

Super-quinta-partiens, the Greater contains the Lesser and 5 remains as $\frac{11}{6}$ and so on.

If any of the numbers of the above are reversed, the word Sub. is written before them.

The Duple of any of the above is formed by adding the the two numbers together for the upper number.

The Triple of any of the above is formed by adding the two numbers of the Duple together for the upper number.

The Quadruple of any of the above is formed by adding the two numbers of the Tripla together for the upper number, and so on.

Example:—$\frac{3}{2}$ = Sesquialtera, $\frac{5}{2}$ = Dupla Sesquialtera, $\frac{7}{2}$ = Triple Sesquialtera.

$\frac{5}{3}$ = Superbipartiens, $\frac{8}{3}$ = Dupla Superbipartiens, $\frac{11}{3}$ = Triple Superbipartiens.

Sesquialtera $\frac{3}{2}$ must not be confounded with (1) Greater Prolation where three minims=one semibreve nor (2) with Hemiolia always written in black notes, which lost $\frac{1}{3}$ of

their value. Sesquialtera always signified three notes to be sung to the time of two.

Sesquialtera to the Breve=3 Semibreves to be sung to to the time of 2 Breves.

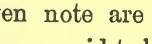
Sesquialtera to the Minim=3 Minims to be sung to the time of 2 Semibreves.

The Upper numbers in any of the fractions when odd= Perfect Time; when even=Imperfect Time: and they signify the number of notes to be sung to the Lower ones.

The Upper notes are termed Progressions, usually Semibreves, Minims, Crotchets, or Quavers.

The Lower notes are termed Radicals usually Breves, Semibreves, Minims or Crotchets.

Broken Sesquialtera and Induction.

When in a bar measure notes of lesser value than the given note are used, as  , instead of , they are said to be broken notes; and are called broken Sesquialtera. The example is called the Induction of six to two; or Tripla is the Induction to Sextupla; again instead of , is termed the Induction of nine to two, or Tripla is the Induction of Nonupla.

The word Induction superseded that of Proportion.

Augmentation.

In Augmentation

Duple meant doubling the value of the notes and decreasing the pace by $\frac{1}{2}$.

Triple meant trebling the value of the notes and decreasing the pace by $\frac{1}{3}$.

Quadruple meant quadrupling the value of the notes and decreasing the pace by $\frac{3}{4}$.

The inverting of the numbers = Diminution signs, cancels Augmentation.

The Greater number was always the lower one.

The signs for Augmentation were fractions, having the Greater number for the numerator as $\frac{2}{1}$, $\frac{3}{2}$.

Diminution.

In Diminution

Duple meant shortening the value of the notes and increasing the pace by $\frac{1}{2}$.

Triple meant shortening the value of the notes and increasing the pace by $\frac{1}{3}$.

Quadruple meant shortening the value of the notes and increasing the notes by $\frac{3}{4}$.

A | , plica or tail always signified Diminution.

O or C cancelled Diminution, as did the Augmentation signs.

The Greater number was always the upper one.

The more usual signs for Diminution were :—

(1) A stroke drawn through the Time and Prolation signs.

(2) The addition of the figures 3 or 2 to the signs.

(3) The reversal of the signs.

(4) The use of coloured notes, red, white, or black. These diminished the value of the notes by half, a breve receiving the value of a semibreve, a semibreve that of a minim.

For Double Diminution the following were used:—

(1) Two strokes drawn through a sign.

(2) The sign reversed with a stroke drawn through it.

These diminished the value of a note by one fourth, thus, a breve received the value of a minim, a semibreve that of a crotchet.

The following specimens of Duple to Decupula should make the above clear :—(1)

Duple	$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{6}$	= Augmentation,	$\frac{2}{1}$	$\frac{4}{2}$	$\frac{6}{3}$ = Diminution.
Triple	$\frac{1}{3}$	$\frac{2}{6}$	$\frac{3}{9}$	,,	$\frac{3}{1}$	$\frac{6}{2}$	$\frac{9}{3}$,,
Quadruple	$\frac{1}{4}$	$\frac{2}{8}$	$\frac{3}{12}$	,,	$\frac{4}{1}$	$\frac{8}{2}$	$\frac{12}{3}$,,
Quintuple	$\frac{1}{5}$	$\frac{2}{10}$	$\frac{3}{15}$	,,	$\frac{5}{1}$	$\frac{10}{2}$	$\frac{15}{3}$,,
Sextuple	$\frac{1}{6}$	$\frac{2}{12}$	$\frac{3}{18}$	,,	$\frac{6}{1}$	$\frac{12}{2}$	$\frac{18}{3}$,,
Septuple	$\frac{1}{7}$	$\frac{2}{14}$	$\frac{3}{21}$	,,	$\frac{7}{1}$	$\frac{14}{2}$	$\frac{21}{3}$,,
Octuple	$\frac{1}{8}$	$\frac{2}{16}$	$\frac{3}{24}$	,,	$\frac{8}{1}$	$\frac{16}{2}$	$\frac{24}{3}$,,
Nonuple	$\frac{1}{9}$	$\frac{2}{18}$	$\frac{3}{27}$	,,	$\frac{9}{1}$	$\frac{18}{2}$	$\frac{27}{3}$,,
Decuple	$\frac{1}{10}$	$\frac{2}{20}$	$\frac{3}{30}$	,,	$\frac{10}{1}$	$\frac{20}{2}$	$\frac{30}{3}$,,

All the above are Multiplex.

Summary.

Augmentation lengthened the value of a note and decreased the speed.

Diminution shortened the value of a note and increased the speed.

Augmentation was termed Proportio Sub-Dupla, and so on.

Diminution was termed Proportio Dupla, and so on.

Double Duple reduced the pace by $\frac{1}{4}$ in Augmentation, and increased it by $\frac{1}{4}$ in Diminution.

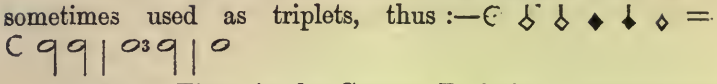
Triple reduced the pace by $\frac{1}{6}$ in Augmentation, and increased it by $\frac{1}{6}$ in Diminution.

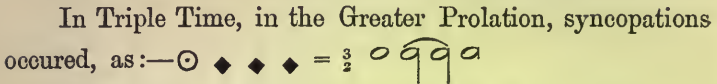
The words "Decrescit in Duplo," "Decrescit in Triplo," were sometimes written.

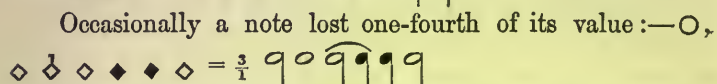
In the xvijth century the terms Adagio, Allegro, etc., superseded Augmentation and Diminution.

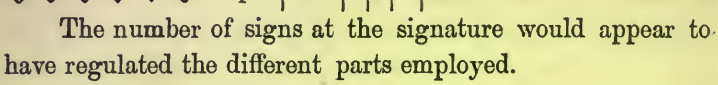
Hemiolia.

This term is used for groups of black notes interspersed with white ones in the xvth century, which, by reason of their colour, lost one-third of their value.

In Duple Time, in the Lesser Prolation, they were sometimes used as triplets, thus :—  =



In Triple Time, in the Greater Prolation, syncopations occured, as :— 

Occasionally a note lost one-fourth of its value :— 

The number of signs at the signature would appear to have regulated the different parts employed.

Michael Pretorius, *c.* 1618, fixed the Integer value of the Breve at about $\frac{1}{10}$ of of a minute, *i.e.*, the Crotchet at eighty of the Mälzel Metronome, which agrees fairly well with the usuage of the present day.*

Rules.

(1) Any single note, two Larges, Longs, or Breves preceded or followed by an equivalent, or any three notes of the same denomination or equivalents, in immediate succession were always Perfect and retained their full value.

(2) Any two Breves or Semibreves in succession, gave to the last one double the value of the first of the two notes.

(3) Any note immediately preceded or followed by one of next lesser value, lost one-third of its value and therefore became Imperfect.

(4) A Breve, however, before a Long at the beginning of a piece counted with the Long, and they were Perfect.

(5) The last of two notes placed between notes of greater value received double the value. A dot·† was usually placed before and a little above the centre of the note, and restored the two notes of greater value to Perfection. This was termed the *Point of Alteration or Duplication.*

* "Dictionary of Music" by Dr. Hugo Riemann.

† The · is found as early as the xivth century.

(6) If a Large or Long was to be treated independently of the next note, a short upright stroke or a dot was placed after it, and was termed the *Divisio Modi or Finis punctorum.*

(7) Any note Perfect by the Time signature, but Imperfect by position, was restored to Perfection by placing a dot immediately after, and level with the middle of the note; this was called the *Point of Perfection.*

(8) Two notes of equal value placed between two notes of greater value, in triple time, to show and maintain the threefold measure had a dot placed high up and between the two, this was called the *Point of Perfection or Division.*

(9) A dot placed after a note lengthened it by half, as at the present time, this was called the *Point of Augmentation.*

The Points were only used in Ternary measure, and were at a later period succeeded by the use of Red, Black, and White notes, as has been explained.

Ligatures.

A series of notes strung together were termed "Notæ Ligatæ, or bound notes, and it is supposed they were sung somewhat quickly but smoothly, the accent generally falling on the highest notes. They were in use as early as 1236, and were succeeded shortly after by evacuated notes.

Obliquity was a sort of shorthand in which a thick dash was used to represent two notes only in succession, the two ends corresponded to the two notes; the interval seldom exceeds a fourth, as: . It could not be used if the last note was not a Breve.

(1) The first note of a Ligature—without a plica or or tail—when the next note (a) ascended = a Breve, if this note (b) descended it = a Long. The first note—with a plica or tail downwards on its left side—if the next

note (a) descended = a Breve, if it (b) ascended it = a Long.

(2) The first two notes are Semibreves if the first had a plica or tail ascending on its left side .

(3) All intermediate notes were Breves—if with a plica or tail they were Semibreves.

(4) The last note was a Breve (a) if it was not placed directly over the last note but one ; (b) if it was in obliquity , , ; (c) when the last two notes were oblique , , , ; (d) when the last note but one was higher and combined with a ligature .

The last note was a Long (a) if it was placed directly over the last note but one, ; (b) if the last note descended ; (c) if the last note—with a plica or tail on its right side—ascended, ; (d) when it was not in obliquity.

Larges and Longs joined were not literally Ligatures, and as with Larges wherever placed always retained their full value.

At a later period any note with a plica or tail on its left side=a Breve, if on its right=a Long.

(1) (a) was said to be With Propriety; (1) (b) Without Propriety.

After 1550, White notes in Ligatures—without plica or tail—were usually Breves. Sometimes when the next note descended they were Longs, or the first note might be a Long and the next a Breve.

White notes—with a plica or tail descending on the left side=a Breve, if on the right side=a Long; if it ascended on the left side it was a Semibreve.

Alteration, Imperfection, Colour, and Divisio Modi retained their meaning in Ligatures.

The Ligatures totally disappeared before the xvjth century.

When printing came in, the position of the plica or tail no longer affected the time value.

Mode, and with it the notes Large and Long, the dot as used in the points of Perfection, Imperfection, and Alteration, disappeared about the xvjth century.

The Breve, with the systems of Time and Prolation, lingered on till the xvijth century, though their names died out, when the Semibreve became the standard measure and was regularly dividēd and sub-divided into equal and definite proportions=2 minims, 4 crotchets, etc. When a power of two of these was used, the time was common, and when a power of three=triple time.

The Italian terms for various degrees of tempo, as Adagio, Andante, Allegro, and so on, were introduced into England by Henry Purcell,* who died 1695.

In the xviijth century fractional signs were used to denote the time at the signature. The Denominator showed the kind of note to be employed, and the Numerator the number of such notes to be taken in a bar, as $\frac{3}{2}$ = 3 minims, and so on.

When the Numerator is divisible by two the time is common, when by three triple, simple time.

The Unit of Measure in the xjth century=a Large.
" " xiijth " =a Long.
" " xivth " =a Breve.
" " xvijth " =a Semibreve.

The first book printed in England with musical notes was the "Polychronycon" of Ralph Higden, a monk of S. Werburgh's Chester, by John de Trevissa, printed by Wynkyn de Worde, London, 1495, thick small folio; and the earliest collection, of twenty English songs by Cornysh 1450-1525, Taverner 1450-1500, Cowper, Fairfax 1460-

* Preface to Sonnata of iii. Parts, Two Viollins and Basse to the organ or harpsichord.

1514, and others, by Wynkyn de Worde, London, 1530, oblong 4to. They are in the British Museum. Both contain a clef, which is found as early as the xth century, and open notes on a stave of five lines. One of the earliest books containing engraved music, is to be seen in one of the cases in the British Museum. The music is written on four lines, with time-signature, clefs, and round-shaped semibreves, minims, crotchets, quavers, and semiquavers. Its title is "Breve et facile maniera d' essercitarsi ad agni scholaro, etc.," by G. L. Conforti; printed at Rome, *c.* 1590.

The first book printed with round notes was "Liber primus Missarum Carpentras,"* 1532; printed by Jean de Channay, Avignon. Now in the Imperial Library, Vienna.

* Eliazar Genet, born *c.* 1500, Chapel Master to the Bishop of Rome *c.* 1518.

APPENDIX A.

MONODIC OR HARMONIC MUSIC.

MONODIC or Harmonic Music dates from the end of the xvjth century. Previously the only apology for harmony was that arising from Organum, Fa Bourdon, and Counterpoint, purely lateral combinations of a series of superimposed melodies, written from left to right, with regard only to the movement of the vocal parts at the prescribed intervals, without any idea of individual chords constructed vertically, which constitutes Modern Harmony.

The advancement of the Modern style was long delayed owing to the rooted antipathy to the tritone or interval of the augmented fourth with its three whole tones, which occurs in the old minor mode of A and in the major mode of C, between F and B. The use of this interval being very rigidly prohibited, neither the major mode with its major seventh, nor the chord of the dominant seventh could be used, modulation, therefore, as now understood, was impossible. The earliest use of the major seventh, or sharpened leading note partially, if not wholly, is found in the English Rota, "Sumer is i-cumen in," and later in a treatise written in 1531 upon Counterpoint, by Stephano Vannco of Recanati, born 1493; it was translated into Latin by Vincenzo Rossetti of Verona, and published in Rome, 1533. In this work are explained the principles and practice of Music, Measurable Music, Notation, and Counterpoint.

The first to make use of the chord of the dominant seventh—as a fundamental discord without preparation—was a French composer, born at Somme, *c.* 1475, one Jean Mouton of Holling in Lorraine, who died at St. Quintin, 1522. Its use, however, does not appear to have become at all general.

Giovanni Pierluigi, born *c.* 1514 at Palestrina in the Campagna of Rome, died 1594, has been called the "Father of Church Music." He was commissioned by the Council of Trent, to organize the music of the Italian Church, which had at that time again sunk into a most deplorable state, the Masses being interspersed with secular songs and dances, blasphemously profane and indecent. The principle he adopted was harmonic effect in contrast to the harsh polyphony of the old Netherland, Holland, and Belgium schools, as represented by Josquin des Pres, 1450-1532. Although he solved the problem, he lacked any feeling of sympathy for that smoothness which should be felt from the use of consecutive chords owing to their mutual relation. His chords follow one another by abrupt and disconnected leaps in a restless manner. His music is absolutely devoid of all expression. He made several attempts to introduce new harmonic combinations in his compositions, introducing an uninterrupted flow of consonant chords, dominant sevenths *prepared*, with dissonant and passing notes charily interspersed. He founded his style and methods on his illustrious predecessor, Christobel Morales, who composed for the Sistine Chapel, and is accounted the greatest, and one of the last composers of the Polyphonic School.

Polyphonic music, and with it the so-called ecclesiastical music, received its death blow at the end of the xvjth and beginning of the xvijth centuries, mainly owing to

the general adoption of the chord of the dominant seventh unprepared.

To Claude Monteverde, born at Cremona in the year 1568, died 1643 at Venice, we may look as the originator of the modern style of composition, a system of Harmony which has continued without interruption to the present day.

In his third and fifth book of Madrigals, published in 1594 and 1599 respectively, are to be found, used with the greatest freedom, and without preparation:

Chords of the Diminished Triad.
,, Diminished Fifth.
,, Major, Dominant, and Diminished Seventh and Inversions.
,, Major Ninth.
,, Suspended Sevenths and Ninths.
,, Perfect Cadences, *i.e.*, Tonic preceded by the Dominant.

The Sharp is also found at the signature.

Dramatic music—the Cantata, Opera, and Oratorio proper—date from this period, *c.* 1599-1640, to which also we owe the unsurpassable family of violins, introduced about the middle of the xvijth century, and which became general in the xviijth century, whose makers, even in these days of enlightenment and ingenuity, have never been equalled, much less surpassed, in the richness and fulness of tone and beauty of workmanship.

The credit of converting the Viols into Violins by the introduction of a curved neck and rounded back belongs to the French.

It also produced musical giants such as the world had never before known. Archangelo Corelli, 1653-1713, the father of the violin; Henry Purcell, b. 1659 d. 1695, the

father of English music; Alexander Scarlatti, b. 1659-1725, the creator of modern opera; George Frederick Handel, 1685-1759, the king of oratorio; John Sebastian Bach, the master of fugue, etc. All born in this wonderful age, the xvijth century.

Chamber music must also be included in this remarkable era which produced such phenomenal advances, not only in every branch of music, vocal and instrumental, but in literature, science, and art generally.

The presence of the chord of the Dominant Seventh unprepared at once shows if a composition is of earlier or later date than the xvijth century. Its use was not general until the middle of the xvijth century, when also Mediæval music received its death-blow, and the old chest of viols practically disappeared, until Mr. Dolmetsch quite recently resuscitated them.

A Chest of Viols comprised: (1) Treble.
,, ,, (2) Mean.
,, ,, (3) Tenor.
,, ,, (4) Viola da Gamba.
,, ,, (5) Violone.

These were introduced into Germany, France, and other countries from England.

Viols were in use from the xvth to the xvijth centuries.

Diatonic Scales.

Our major and minor modes are included in the ten notes of the Diatonic Scale beginning on A

minor
A B C D E F G a b c;
major

these two modes are generally termed relatives having the same signature but different key-note.

A Tonic minor mode has the same key-note as the Tonic major mode but a different signature.

The minor mode is used in three different ways :

(1) As written above = the Old Minor.

(2) With the seventh raised a semitone = the Harmonic.

(3) With the sixth and seventh raised a semitone in ascending only = the Arbitrary.

The major mode came into general use between the middle of the xvjth and xvijth centuries. It is used by Claude Monteverde.

The chromatic scale comprises twelve semitones ascending by sharps, and twelve descending by flats.

Intervals.

The smallest interval on the pianoforte and other keyed instruments is the semitone, which is the metre by and from which all other intervals are counted.

Intervals are simple when confined within the compass of an octave, or compound when exceeding the limits of an octave.

The simple intervals of which the compound are formed can easily be found by substracting seven from the compound interval, thus :

$9 - 7 = 2$, and 9 = the 2nd
$10 - 7 = 3$, and 10 = the 3rd
$11 - 7 = 4$, and 11 = the 4th
} Doubled in the octave.

Diatonic intervals consist of the notes only belonging to the scale.

Chromatic intervals consist of the notes not belonging to the scale.

Enharmonic intervals consist of the notes which are changed in name, but not on keyed instruments as the organ, pianoforte, etc., in sound.

A Diatonic semitone consists of two different letters, as F—G♭.

A Chromatic semitone consists of the same letter altered, as F—F♯.

There are five kinds of intervals :

Perfect, which by inversion remain Perfect.
Major, ,, ,, become Minor.
Minor, ,, ,, ,, Major.
Augmented, ,, ,, Diminished.
Diminished, ,, ,, Augmented.

The unison is not an interval but for convenience.

Intervals are always counted upwards, and include those counted from and to.

The octave in the major mode is made up as follows :

The first note, Tonic or key note	= a major tone	$\frac{9}{8}$
The second note, or Super-tonic	= a minor tone	$\frac{10}{9}$
The third note, or Mediant		
The fourth note, or Sub-dominant	= a major semitone	$\frac{16}{15}$
The fifth note, or Dominant	= a major tone	$\frac{9}{8}$
The sixth note, or Sub-mediant	= a minor tone	$\frac{10}{9}$
The seventh note, or Leading note	= a major tone	$\frac{9}{8}$
The eighth note, or Octave	= a major semitone	$\frac{16}{15}$

Concords, which are satisfactory in themselves, are either Perfect as above or Imperfect = major and minor thirds and sixths.

Discords are not satisfactory in themselves, and require to be resolved = the discord must be followed by a concord—they are either Diatonic or Chromatic.

Diatonic = major and minor seconds and sevenths.

Chromatic = all augmented and diminished intervals.

A melody should not proceed by an augmented nor diminished interval.

Chords.

A chord is, strictly speaking, the simultaneous combination of two or more notes. The common chord or triad consists of any note being taken for the bass with its third and fifth notes added above. So long as the bass note is the same, the upper notes may change their positions without altering the chord.

It is figured $\frac{3}{5}$ or 5 = Third.
Fifth.
Bass.

The placing of figures under the Bass to show what chords are to be employed is known as Figured or Thorough Bass.

A chord is major or minor according as its third is, this determines a mode.

There are in each octave of the major mode

Three major chords } which occur on the { Perfect intervals = 1.4.5.
Three minor ,, } which occur on the { Imperfect ,, = 2.3.6.

One diminished triad, which occurs on the 7th or leading note.

Inversions of Chords.

A chord is inverted when the root is not in the bass part.

The number of notes in any interval added to those of its inversion = 9 and the semitones = 12.

The Tonic, Fourth, Fifth, and Octave are Perfect, and remain so on inversion; they are so called because any alteration either by raising or lowering them converts them at once from concords to discords.

A chord as a rule admits of one less inversion than there are different notes in such chord. The first inversion

of the common chord has the third in the bass, which may not be doubled. It may begin a piece but never end one. It is figured $\frac{6}{3}$ or 6.

1st Inversions of major chords give a minor third + a perfect fourth—the major sixth from the bass, the root of the chord.

,, minor chords give a major third + a perfect fourth—the minor sixth from the bass, the root of the chord.

The second inversion of the common chord has the fifth in the bass; it may never begin nor end a piece of music, and always occurs on the accented part of the bar. It is figured $\frac{6}{4}$.

2nd Inversions of Major / Minor Chords give a Perfect fourth + a major third / a minor third. the root of the chord

The diagrams show at a glance the new position which each note in the original chord occupies in the different inversions; reading across from left to right.

COMMON CHORD.

Original Position.	*First Inversion.*	*Second Inversion.*		
G=Fifth becomes the	Third	Bass	=the Fifth	of Original Chord.
B=Third ,,	Bass	Sixth	=the Third	
C=Bass ,,	Sixth	Fourth	=the Root	

CHROMATIC CONCORDS,

Chromatic concords and their inversions contain chromatic notes, hence the term.

In the Major mode they are:

(1) Major common chord on the minor second and first inversion.

(2) Major common chord on the supertonic and first inversion.

(3) Major common chord on the minor sixth and first inversion.

(4) Minor common chord on the subdominant and and two inversions.

(5) First inversion on the subdominant of a triad with a diminished fifth.

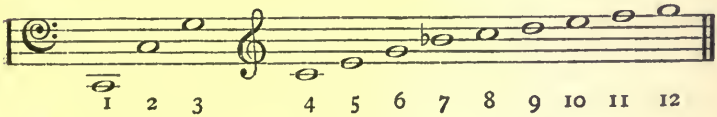
In the Minor mode there are two:

(1) A Major common chord on the minor second with its first inversion, called the "Neapolitan sixth."

(2) A Major common chord on the supertonic with its first inversion.

Fundamental Discords.

Fundamental discords are generated from a fundamental note, prime, or generator as under:



They require no preparation—being heard in a previous chord like other discords,—but need resolution, that is being followed by a consonance. They are either Diatonic or Chromatic, and consist of a series of thirds superimposed on a major triad, and are as follows:

(1) The Dominant 7th = Dominant major triad + a minor third.
(2) The Dominant 9th = Dominant 7th + a major or minor third.
(3) The Dominant 11th = Dominant 9th $\begin{matrix}\text{major} + \text{a minor} \\ \text{minor} + \text{a major}\end{matrix}$ third.
(4) The Dominant 13th = Dominant 11th + $\begin{matrix}\text{a major} \\ \text{a minor}\end{matrix}$ third.

(5) Chord of the Dominant 7th, minor
(6) Chord of the Dominant 9th, major and minor
(7) Chord of the Dominant 11th
(8) Chord of the Dominant 13th, major and minor

} on the Tonic, Supertonic and Dominant, from the fundamental notes of which they are respectively derived.

The major 9th on the Supertonic
The major 13th on the Tonic
} and on the Dominant are not used in the Minor mode.

Essential Discords.

Essential discords are those which belong to the Harmony, and are as follows:

(1) Chord of the augmented fifth on the mediant of of major and minor modes.

(2) Chord of the fifth on the supertonic of the minor mode.

(3) Chord of the seventh, on any note—the second inversion is not available.

(4) Chord of the seventh, with augmented fifth on mediant of major or minor mode.

(5) Chord of the seventh with a diminished fifth on the supertonic of the minor mode.

(6) Chords of the ninth. The Root is frequently omitted in inversions; the last inversion is unavailable.

Note.—The bass of a second inversion of a discord usually ascends or descends to the next note.

Consecutive perfect unisons, fourths, fifths, and octaves should never occur. Excepting under very exceptional circumstances, the leading note—the third of the dominant—should ascend to the tonic or keynote by a semitone.

Chord of the Seventh.

Original Chord.	*First Inversion.*	*Second Inversion.*	*Third Inversion.*	*Usual Progression*
F=Seventh becomes the	Fifth	Third	Bass	=descends.
D=Fifth ,,	Third	Bass	Sixth	=free.
B=Third ,,	Bass	Sixth	Fourth	=ascends.
G=Bass ,,	Sixth	Fourth	Second	

Chord of the Ninth.

Original Chord.	*First Inversion.*	*Second Inversion.*	*Third Inversion.*	*Fourth Inversion.*	*Usual Progressions.*
A = Ninth becomes the	Seventh	Fifth	Third	Bass	descend.
F = Seventh ,,	Fifth	Third	Bass	Sixth	descend.
D = Fifth ,,	Third	Bass	Sixth	Fourth	ascends or descends a degree.
B = Third ,,	Bass	Sixth	Fourth	Second	ascends.
G = Bass ,,	Not used.				

Chord of the Eleventh.

Original Chord.	*First Inversion.*	*Second Inversion.*	*Third Inversion.*	*Fourth Inversion.*	
C = Eleventh becomes the	Seventh	Fifth	Third	Bass	The 1st inversion is the same as the Chord of 7th on the Supertonic.
A = Ninth ,,	Fifth	Third	Bass	Sixth	The 2nd inversion is the same as the Chord of $\frac{6}{5}$ on the Subdominant.
F = Seventh ,,	Third	Bass	Sixth	Fourth	The 3rd inversion is the same as the Chord of $\frac{6}{4}$ on the Submediant.
D = Fifth ,,	Bass	Sixth	Fourth	Second	The 4th inversion is the same as the Chord of $\frac{6}{4}$ on the Tonic.
B = Third ,,	not	used in in-	versions.		
G = Bass ,,					

The root and first inversion of this chord are not used. The second inversion therefore, is for convenience usually accounted as the first inversion, the third = the second, and so on, as in the table above.

HARMONY.

	ORIGINAL POSITION.	INVERSIONS OF THE CHORDS.					
	0	1	2	3	4	5	6
COMMON CHORD.	B	6	4	2	7	5	3
	3	B	6	4	2	7	5
	5	3	B	6	4	2	7
CHORD OF 7TH.	7	5	3	B	6	4	2
CHORD OF 9TH.	9	7	5	3	B	6	4
CHORD OF 11TH.	11	9	7	5	3	B	6
CHORD OF 13TH.	13	11	9	7	5	3	B

The squares formed by each of the thick black lines on the right of "B" joining the thin lines under "B," embrace respectively the Chords named on the left. The figures = the original chords, with the intervals they change to on each inversion of the positions of the intervals, as shown under columns 1—6 on reading from left to right; and if read upwards they represent the figured Bass of each chord or inversion.

"B" = the original Bass or Root of the chords.

The root in any inversion of a dominant chord will be found by arranging the notes forming the chord into a regular series of thirds in order, until the chord of the dominant seventh is reached; the three lowest thirds = a chord of the dominant seventh, and the lowest note will be the root.

When a chord is derived from the

Dominant		leading note.
Tonic	it contains the	minor 7th.
Supertonic		augmented 4th.

Chord of the Augmented Sixth.

The chord of the augmented sixth is available in both the major and the minor modes. It is formed on the minor sixth of the major mode, with the intervals of the chord of the dominant minor ninth on the supertonic, less the fifth. Example in the key of C major: A♭, D, F♯, C, E♭. Also on the minor second of the minor mode, with the intervals of the minor ninth of the dominant, less the fifth. Example in the key of C minor: D♭, G, B, F, A♭.

The Chord on the minor sixth is used with either

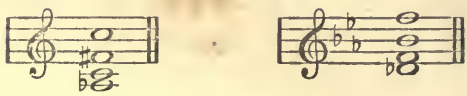
(1) Root and ninth of supertonic
(2) Ninth of supertonic
(3) Root of supertonic
} omitted.

The Chord on the minor second is used with either

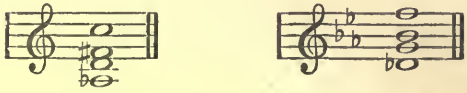
(4) Root and ninth of dominant
(5) Ninth of dominant
(6) Root of dominant
} omitted.

The chord is therefore written in three ways, and called the

(1) Italian Sixth



(2) French Sixth



(3) German Sixth

Suspensions.

Suspension, as the name implies, is the suspending or holding back the resolution of a chord or note, whilst the rest of the chord, or part of it, moves on, and must take place on the accented portion of the bar.

A discord, whether suspended or not, must not be sounded simultaneously with the note upon which it is resolved, excepting only

(1) The ninth with the root in the bass.

(2) The ninth with the root in an upper part.

(3) The fourth with the third in an upper part or in the bass.

(4) The third of the minor mode by the augmented fifth.

The suspended note is otherwise treated in every respect as it would be were it not suspended.

A suspension, like all other discords may—prior to its resolution—rise.

Passing Notes.

Passing notes were first used about the first half of the xijth century. They are not essential, and not belonging to the harmony, are almost free in their progression.

Cadences.

Every piece of music ends with a Close or Cadence, which establishes its tonality, of which there are several kinds:

(1) The Tonic preceded by a major chord on the mediant or third; used by Gounod.

(2) The Tonic preceded by a major chord on the subdominant or fourth; called Plagal.

(3) The Tonic preceded by a minor chord on the dominant or an inversion of it; very unusual.

(4) The Tonic preceded by a major chord on the dominant or fifth; called Perfect or Full.

The last is the most general. The Plagal is common in old Church music. The Perfect Cadence is usually major, whether the mode be major or minor. This establishes the tonality, as it is called, to the key.

The first portion of a movement, the first half of a double chant, of hymn tunes, etc., usually ends on the dominant.

Bach generally used minor chords at the end of his preludes, but not of his fugues or chorales. There was a prejudice against the use of the minor third at the close of a piece in the xvjth and xvijth centuries.

Handel and Mozart used both the minor and the major chords; but they also occasionally omitted the third at the end of a piece.

There are two other forms of the Cadence, usually termed half-closes or Cadences:

(1) The Imperfect or Half-Close = a common chord on the dominant, preceded by a common chord on the Tonic;

(2) The Deceptive or Interrupted Cadence = a common chord on the dominant, followed by a common chord on the submediant; it is used as a device to temporarily delay the perfect Cadences.

False Relation.

False relation occurs when the same note appears in one part, and again in the next chord in another part altered, for instance, when a note appears as a natural in a tenor part in a chord, and as a flat or sharp in the treble, alto, or bass in the next chord. False relation does not occur when the third of the first chord is the root or fifth of the second chord.

Sequence.

A sequence is a series of repetitions of the same intervals, chords, or form of melody.

Movements.

There are three kinds of movement or motion:

(1) Similar, when the parts move in the same direction.

(2) Contrary, when the parts move in opposite directions.

(3) Oblique, when one or more parts are stationary whilst the others move.

Transposition.

The normal modes are:

C Major } with semitones between 3 and 4, 7 and 8 — A Minor { with semitones between 2 and 3, 5 and 6

The presence of a sharp or flat at the signature indicates a transposition of one of the above, the sharp or flat being so placed solely to ensure the semitones falling in their proper places as above.

Every sharp added to the signature shows the mode has been transposed a fifth higher or a fourth lower, as under:

1 sharp = a fifth above or a fourth below C = key of G
2 sharps = ,, ,, ,, ,, G = ,, D
3 sharps = ,, ,, ,, ,, D = ,, A

The sharp is always applied to the fourth note of the key from which transposition has been made forming the seventh of the new key.

Every flat added to the signature denotes the mode has been transposed a fourth higher or a fifth lower—thus

1 flat = a fourth above or fifth below C = key of F
2 flats = ,, ,, ,, ,, F = ,, B♭
3 flats = ,, ,, ,, ,, B♭ = ,, E♭

The flat is always applied to the seventh note of the key from which transposition has been made, forming the fourth of the new key.

Spohr was the first in England to conduct with a baton.

APPENDIX B.

Gregorian *v.* Anglican Music.

It is neither the province nor intention of the writer to enter into the relative merits or demerits of the use in the Services of the Church of England at the present time, of the Mediæval—mis-called Gregorian, or Anglican chants, but it may not be altogether out of place, or void of interest to state some of the opinions of eminent Churchmen and Musicians on the subject.

Many urge that the music in vogue in the Church during the middle ages, fancifully ascribed to St. Ambrose and St. Gregory respectively, interesting as it may be from an antiquarian point of view, does not warrant its habitual use to the exclusion of any other system; such intention being quite foreign to the spirit of the English branch of the Church Catholic.

The Church of England has a pure Liturgy, a ritual, architectural features in her buildings, and a music entirely her own, and it behoves us Anglicans to loyally adhere as closely as possible to these our inheritances.

The chief objections to Anglican music raised by enthusiasts for the so-called "Gregorian" music are:—

1.—That it is fettered by time measure, being barred.

2.—That it is too florid and not devotional.

3.—That it is modern.

(1) To the first objection it has been frequently pointed out that the so-called "Gregorians" also fall into a regular

measure, although not actually barred, as anyone can satisfy himself when listening to them sung. How are the choirs to be kept together without some regularity of rhythm? Measured music is not a modern invention, it being in use as early as the xith century.

(2) If out of the thousands of single and double Anglican chants, a few are found highly florid and unsuitable for use in the services of the Church—one exists with a shake in it—how many are there both devotional and truly beautiful?

(3) That they are comparatively modern, being less than four centuries old, is quite true, but it need scarcely be pointed out that it has always been the custom and spirit of the Church to incorporate into her services every advance made in the arts, for the edification of God, and not adhere to any stereotyped form, whether in material form or workmanship.

Is Anglican music so antagonistic to the spirit of the English Church that it should be set aside, almost, if not entirely, for the substitution of a system adopted by the modern Italian mission merely because such is ancient? Is the art of Music as regards the Church to retrogress or to progress? Save for a particular effect on very rare occasions the so-called "Gregorian" chants are out of place in the services of the Church of England at the present day; they are not in harmony with English ears. It is a morbid sentiment only of a few enthusiasts that suggests their exclusive use.

The attempt to reintroduce the crude chants of the Middle Ages is undoubtedly felt to be unsatisfactory by the very persons—ignorant of their history—who would urge their partial if not universal adoption to the exclusion of our National Chant, known as the Anglican Chant; for we

find not only are they compelled inconsistently to call in the aid of a modern florid accompaniment—a gross incongruity—but a host of French and other light "endings," and what Sir John Stainer calls "foliations." To the Continent recourse is had for the many clever adulterations of "plainsong" for which the French and Belgians are justly renowned.

If the antiquity of the old modes be an argument to be put forth in their favour, why not confine the use of the organ also as an accompaniment, to the ancient systems of Diaphony, Triaphony, and Tetraphony? Why make use of such an anachronism as a modern accompaniment? It is like inserting a classical arch or window into a Gothic building, or putting a piece of new cloth into an old garment, making the rent worse. If the old modes are made use of at all let them be accompanied consistently with the makeshift harmony of the period also.

Gregorian musical literature continues to grow apace, though the probabilities of the ancient Church modes finally ousting the modern Anglican chant are less than ever. We know how endeavours are made in some quarters to gild the pill of the Gregorian tones by tricking them out with ornate chromatic harmonies in spite of the incongruity as well as the injurious effect on the voice by perpetually singing them in unison.*

If it can be shown, that upon the discovery of Harmony, as we now understand the word, and which, strictly speaking, was in general use during the xvjth century—the period of the close of the Reformation—the Church of England at once adopted and incorporated its use in her services; if we find a special kind of chant invented by English Churchmen for use in, and adopted by, the Church

* "Musical Times," xxvij., 672-3,

of England only, why should English Churchmen desire to discard it, and hark back to the archaic music of the middle ages in use at a time when there was no other possible under the existing circumstances ?

The late Dr. Dykes, M.A., Mus. Doc., described them as "having had their day," and said that "ancient melodies decked out in the license of modern harmonies were revolting."

Mendelssohn [1809 d. 1847] says: "I can't help it, but I own it does irritate me to hear such holy and touching words sung to such dull, drawling music. They say it is canto fermo, Gregorian, etc. No matter. If at that period there was neither the feeling, nor the capability to write in a different style, at all events we have now the power to do so, and certainly this mechanical monotony is not to be found in the Scriptural words; they are all truth and freshness, and moreover expressed in the most simple and natural manner. Why, then, make them sound like a mere formula ? and in truth singing as this is nothing more. Can this be called sacred music ? There is certainly no false expression in it, because there is none of any kind; but does not this fact prove the desecration of the words ?" (In one of his letters to Lady Wallace.)

The late Canon the Rev. Sir F. A. Gore Ouseley, Bart., M.A., Mus. Doc., Professor of Music at the University of Oxford, and Precentor of Hereford Cathedral, denounced the Plainsong as an "offence" unto him.

The late Sir George Macfarren [1813-1887], M.A., Mus. Doc., Professor of Music at the University of Cambridge, and President of the Royal Academy of Music, in his "Lectures on Harmony," 2nd edition, p. 12 (Longmans), wrote: "Those well-meaning men who would resuscitate the standard use of so-called Gregorian music

in the Church of England evidence mistaken zeal, and false antiquarianism, illogical deductiveness, artistic blindness, and ecclesiastical error."

The late Dr. Samuel Sebastian Wesley [1810, d. 1876] deprecated "the Plainsong being introduced into our choirs."

The late Professor John Pyke Hullah [1812, d. 1884] spoke of it as "strange, dull, uncouth sort of stuff."

Mr. Birbeck remarked, anent these chants and their place in the Church of England, "they are far from being devoid of interest, but it is not on that account their use should be urged to accomplish the speedy expulsion of all Anglican chants from the services of the Church."

The following amusing legend is told by Da Corte in his "Storia di Verona,' p. 107 of the Venetian edition of 1744:—"Gregory the Great, to stimulate his devotion, used to visit the graves of the departed. Whilst so engaged, he once saw one of the tombs uplifted, and the head of a long-buried man appear, with his pale tongue thrust out, as if in agony. The saint, nothing daunted, accosted the spectre, and was informed that he was the Emperor Trajan, condemned to suffer for ever for his idolatry. Pitying so illustrious a sufferer, the saint resolved to importune the Divine mercy for him, and succeeded so well that the Almighty at length set the Emperor free and admitted him into Paradise. But, as the course of Divine justice had been interrupted, He resolved to inflict some bodily suffering upon the saint, who had been the means of its interruption, and accordingly ordained that Gregory should be afflicted with pain in the abdomen—*dolore intestinale*—except at such times as he should be occupied in saying Mass. Gregory then bethought himself of some way of avoiding his malady by

prolonging the service of the Mass to the utmost extent, and so he instituted the chant called after him Gregorian, which was at first more prolix and dreary than it has since become. Some thought this rather hard of the saint, because this style of chant, though it would relieve him of his pains, would be very apt to give *others* the pain in the abdomen from its length and dreariness."

Another story of the Gregorian chant may not inaptly follow this. A certain prelate having attended service at an English church where this music was in use, was asked afterwards by the Vicar how he had liked the music, "Oh, very well," was the reply. "But," said the Vicar. "what did you think of the Psalms?" "Oh, pretty well," said the prelate. "It is traditionally recorded," said the Vicar, "that the tones are the original ones to which David composed the Psalms." "Really," replied the prelate, "you don't say so! Ah! then, I don't wonder at Saul throwing his javelin at him."

Can it be claimed there is beauty, brightness, or anything cheerful in a "Gregorian?" They are not even congregational, and are felt by many to be a real hindrance to devotion. Unisonal singing palls on one if there be too much of it. The effect on the voice where these mournful modes are in vogue—occurring as they do at the junction of the so-called head and chest registers—is very marked, it produces roughness and coarseness; to the singer it causes weariness, to the hearers it is torture.

John Marbeck's "Book of Common Prayer," with musical notes, was unauthorised, and a very limited number of copies appear to have been struck off; it never reached a second edition.

A

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ERRATA.

Page 57, line 11, *for* "letters" *read* "letter."

„ 63, line 18, *for* "lyre" *read* "lyric."

„ 70, line 21, *for* "Guant" *read* "Gaunt."

„ 82, line 14, *for* "decant" *read* "descant."

„ 136. Musical Examples, 2nd column, *read* B♮ in each.

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